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# PACIFIC *Pulp & Paper* INDUSTRY

Vol. 14 • No. 4

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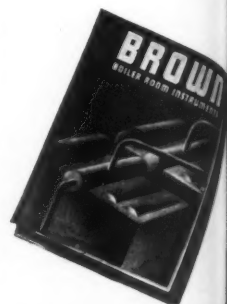
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# *Pacific* **PULP & PAPER** *Industry*

*The Journal of the  
Pacific Coast Industry*

**APRIL • 1940**

**Vol. 14 — No. 4**

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# Water Shipping Called Coast's Number One Problem

● Pacific Coast industry and agriculture called upon the Maritime Commission April 11th in San Francisco for at least 25 ships as the only way to end a "vicious thrust" at the general economy of this great area. The shortage of intercoastal cargo vessels was termed the Pacific Coast's number one economic problem.

Admiral Emory S. Land, chairman of the commission, was petitioned to make available to the intercoastal and coastwise service Government ships now lying idle in Atlantic harbors.

And at the same time the Pacific Coast Association of Port Authorities, in special meeting assembled, named a committee to explain personally to the committee spreading paralysis of Coast-to-Coast shipping.

Since the outbreak of war in Europe the cargo space available on the intercoastal route has declined week by week through the removal of a large number of ships from service by reason of sale and charter. As is generally known the costs of the intercoastal lines have been rising in recent years, but up to the war there was no opportunity for the sale or charter of the intercoastal ships at a greater profit than they could earn on their established routes.

The war brought this demand and as a result several intercoastal lines have gone out of business selling their ships to other domestic or foreign shipping companies for use on routes more profitable than the intercoastal. While this has given long desired relief to the shipping companies the loss of the ships has severely damaged the industries of the Pacific Coast which must depend upon the lower water freight rates to compete with Eastern manufacturers.

Among those representing the Pacific pulp and paper industry at the meeting which took place at the Palace Hotel, were Harold E. Kerry, traffic manager of Rayonier Incorporated, and Jack J. Seid, traffic manager of Crown Zellerbach Corporation.

Before the resolution was drafted and adopted, the port officials from Vancouver to San Diego heard reports from pulp and paper industries, lumber, milling wheat, dairy,

trade, and manufacturing interests. To a man they told a story of an increasingly desperate crisis facing the Pacific region.

Briefly, there are not enough ships to carry Western produce to its normal market in the East. The decrease has been caused by the extremely lucrative offers made American shippers by a world at war. Ships have been sold, chartered or diverted from their normal run from the Pacific to Atlantic.

Shippers of bulk goods, pulp and paper, lumber, farm produce and raw materials—cannot ship entirely by railway, pay the increased transportation cost and still compete with Eastern firms.

Widespread shutting down of plants in Washington, Oregon, and California will be the immediate result, spokesmen maintained.

Smith Wilson, vice-president of the Seattle Port Commission and named chairman of the committee to meet with the Maritime Commission, maintained, with others, that an emergency exists and therefore old ships can be used.

Other members of the committee include: J. F. Marias, president of the San Francisco Harbor Commission, vice-chairman; T. H. Banfield, Portland, and George Moore, Los Angeles, also vice-chairmen; Philip Carroll, Portland, executive secretary.

Association President G. E. Arbogast, Los Angeles, explained the committee would be increased in size to include representatives of all sections of the industrial and commercial life on the Pacific Coast.

The more than 150 delegates at the meeting voted unanimously to accept the petition that included the three following proposals:

*Attend*  
**1940  
FALL MEETING  
TAPPI  
SEATTLE, WASH.  
AUG.  
20-21-22-23**



1. That the United States Maritime Commission make available a sufficient number of the laid up vessels to replace those which have been or may be withdrawn since the summer of 1939.

2. That the laid up vessels be made available for intercoastal and coastwise service only, and that these vessels be not transferred to any foreign service.

3. The shortage of cargo space constitutes a vicious thrust at the Industry of the Pacific Coast and thereby creates a very definite commercial emergency, which cannot be remedied by any other means of transportation.

#### Pulp Industry in Stronger Position

● The pulp industry of the Pacific Coast is in a stronger position temporarily than the lumber, flour milling and other industries in respect to the shortage of intercoastal vessels as most of its tonnage can be moved by rail. With the paper mills who buy pulp fearful that the Scandinavian sources of wood pulp may be shut off indefinitely the additional cost of rail shipments from the Pacific Coast over water shipping will not be a deterrent.

When the war ends and the Scandinavian pulp producers again become serious competitors of domestic pulp mills, the weakness of the Pacific Coast pulp mills' position will become apparent. Then the additional cost of rail shipping could become an extremely serious factor which might easily result in the pulp industry virtually closing down.

If the loss of intercoastal bottoms were temporary the industry would not be so worried. As long as other shipping routes are more profitable the ships will not come back to the intercoastal route, nor will the operators build or buy ships to replace those now being removed from the service. Hence the participation of the pulp industry in the attempt to persuade the Maritime Commission to allocate a number of old ships to the intercoastal route to replace in part the ships sold and chartered to other lines.

#### Railroads Non-Cooperative

● In recent months the Pacific Coast pulp industry has endeavored to obtain a lower all rail rate in the middle west and the east but with no results. The western railroads say that they are willing to grant reductions to help out the industry during this period of ship shortage

with the hope that lower rail rates might hold a large part of the business permanently, but the eastern railroads, from Chicago eastward, declined to consider any reductions. So the rail rates remain where they have been for several years.

#### Export Shipping

● Export of pulp and paper is a problem, too. Since the war began the export demand for Pacific Coast pulp and paper has risen considerably but the movement is erratic due to insufficient ships. Pulp destined for England is allotted space by the British Admiralty, but pulp ordered by buyers in other parts of the world particularly in South America has to wait its turn for the inadequate space available.

#### Babcock & Wilcox Sue North Carolina Pulp Co.

● The suit of the Babcock & Wilcox Company against the North Carolina Pulp Company of Plymouth, N. C., a division of the Kieckhefer Container Company, claiming infringement of its patents covering black liquor recovery furnaces, was called for trial April 8th in the United States District Court in Wilmington, Delaware. Babcock & Wilcox Company seeks \$1,000,000 damages for the alleged patent infringements.

The Babcock & Wilcox claims of patent infringement are based upon claim one of patent 1,771,829 and claims 3, 5 and 7 of patent 2,050,400. The former patent was granted on July 29, 1930, to Charles L. Wagner and the latter was granted to Mr. Wagner on August 11, 1936. Babcock & Wilcox purchased these patents in 1936.

L. S. Wilcoxon of Babcock & Wilcox was chief witness for the plaintiff at the trial which was presided over by Federal Judge John P. Nields. Mr. Wilcoxon outlined the history of the recovery furnaces in the kraft process describing the old type soda and sulphate units, the Wagner furnace and the later Tomlinson furnace. He told of the acquiring of the Wagner patents by Babcock & Wilcox in 1936.

The witness then described the defendant's recovery system at Plymouth, North Carolina, as he observed it in November, 1939. At that time, he stated, samples were taken from the furnace and later analyzed by Babcock & Wilcox. This analysis was placed in evidence to show certain details of the defendant's operations. Following the cross examination of Mr. Wilcoxon the North Carolina Pulp Company began direct testimony with Mr. Badenhausen on the stand. He stated he designed the recovery unit at Plymouth and that the recovery problem was only a simple combustion problem. He stated the unit was for 200 tons per day the largest built to date. Following his testimony Mr. Roher engineer for Day & Zimmerman, contractors who built the Plymouth plant, testified and placed in evidence various patents and articles on the prior art.

The defendants placed considerable reliance on the Moore and Haner patents. The former were taken out by the late H. K. Moore of the Brown Company and refer to black liquor furnaces

of the horizontal type such as those said to have been used at La Tuque, Quebec. The Haner patents referred to the burning of distillery wastes.

Testimony was concluded on April 12th. Briefs are to be submitted to the court by May 25th and the arguments are scheduled for June 8th. Judge Nield's decision is expected soon after that date.

#### Production Ratio Still Above 80%

● The weekly production to capacity ratio report of the American Paper & Pulp Association showed a preliminary figure of 80.5 per cent for the week ending April 6th. However, for several months, these preliminary reports have been revised slightly upward when all reports were in.

The comparable week in 1939 showed 83.7 per cent of capacity. The first fourteen weeks of 1940 show a percentage operation of capacity of 87 per cent against 81.5 per cent for the same period of 1939, 67.5 per cent for 1938 and 90.4 per cent for 1937.

January of this year showed 90.6 per cent against 77.5 per cent for January of 1939; February of 1940 dropped to 86.5 per cent as compared with 81.7 per cent in February a year ago; and March of the present year was 84.1 per cent against 84 per cent for March, 1939.

Paperboard operating ratios have been declining, too. January showed 71 per cent, February 70 per cent and March 69 per cent. The week ending April 6th reported 68 per cent. The high point in paperboard operating ratios was reached in October, 1939, with 84 per cent.

#### B. C. View of Southern Pine

● Southern pine may yet become a direct competitor of British Columbia pulpwood species, according to E. C. Manning, the province's chief forester, who returned recently from a tour of the southern states.

Manning said that reforestation and protection of timber stands are being intensively carried out in the southern pine regions. The pine area includes eight states, which now comprise 122 million acres, under forest cover. This is more than the productive forest acreage of British Columbia at present, although the volume of timber is about the same, says Manning.

Approximately 95 per cent of the timberland is privately owned, and abandoned farm lands are being reseeded. There are 8000 sawmills, many of them small, portable units. They utilize about half the annual cut, while twenty-five pulp and paper mills are using between 6 and 7 per cent, while the remainder of the cut is for fuel and domestic purposes.

Manning's impression was that pulp material could not be grown to any extent in fifteen years in the southern areas, although thinnings could be carried on in stands of that age.

Actually thirty-five to forty years could be regarded as the average rotation, said Manning. This is about one-half the period often advocated in British Columbia. The southern pine grows about one inch in diameter for every three years and can produce nearly one cord per acre per year.



# Pulp Imports Declined In February by 39.4%

From January level, BUT February pulp imports were 43.3% HIGHER than in February of 1939 and 21% higher than in February of 1938—Decline due in part to war and in part to ice in northern Baltic—Entry of Norway into war causes belief that exports of Scandinavian pulp will be greatly restricted but only time will give the answer.

THE decline in wood pulp imports, long expected by many people, finally materialized in February when 158,827 short tons were imported, a decline of 39.4 per cent from the January imports of 262,171 tons. However, the February imports were 43.3 per cent higher than the imports in February, 1939, and 21 per cent higher than those in February, 1938.

Imports of wood pulp during February were the lowest of any month since the war began but higher than the 150,569 short tons imported in August, 1939, and just slightly under the September imports of 160,417 short tons. October imports were 216,142 tons; November imports, 272,049 tons; December imports, 255,458 tons; and January imports, 262,171 tons.

The effect of the war between Finland and Russia on Finland's pulp exports was more apparent in the February figures than in the January data. Imports of wood pulp from Finland during February were but 8,753 short tons, a decline of 79.1 per cent from the 41,885 short tons imported from Finland in January. The January figure represented a 7 per cent decline from the 45,154 short tons from that country in December. But the December imports from Finland were 66 per cent higher than November's. The November pulp shipments from Finland of 27,190 short tons represented a relatively normal total.

The imports from Finland consisted of 2,913 short tons of bleached sulphite and 5,840 short tons of unbleached sulphate pulp.

From Norway the United States imported 6,161 short tons of wood pulp in February, a decline of 39.8 per cent from the 10,236 short tons imported in January. The January figure represented an increase of 1 per cent over December.

The imports from Norway were made up of 140 short tons of unbleached sulphite, 4,245 short tons of bleached sulphite and 1,776 short tons of unbleached sulphate.

Sweden supplied the United States with 81,968 short tons of wood pulp in February, a decline of 43.1 per cent from the 144,111 short tons shipped in January. The January total was, in turn, 51.5 per cent above the December imports from Sweden.

The imports from Sweden during February were made up of 2,808 tons of unbleached mechanical pulp, 45,958 tons of unbleached sulphite, 3,130 tons of bleached sulphite, 25,626 tons of unbleached sulphate and 4,446 tons of bleached sulphate pulp.

The imports from Canada in February declined very little in comparison with the shipments from Scandinavian countries. The Canadian total of 58,234 short tons was 7.3 per cent below the 62,835 short tons in January which was, in turn, 14 per cent below December shipments of 73,208 short tons.

In February Canada supplied 11,915 tons of unbleached mechanical pulp; 13,396 tons of unbleached sulphite pulp; 22,616 tons of bleached sulphite pulp; 5,508 tons of unbleached sulphate; 4,001 tons of bleached sulphate; and 798 tons of soda pulp.

Attention of the reader is called to an error in Department of Commerce's December pulp import report which has just been corrected. The imports of unbleached sulphite pulp from Sweden in December were 38,182 short tons instead of the 58,182 short tons listed in the preliminary report. Our tables have been revised as to totals and percentages in accordance with the reduced figure.

● Today, April 12th, the question of the industry is, "What are the converting mills going to do for pulp?" This question is based upon the assumption that Norway, Sweden and Finland are out of the United States market for some time. At this writing no one can answer the question. It may not be a sound question for the assumption may prove erroneous even before this is off the press.

It does look as if Norway will be out of the pulp market for a time, but should the British and French succeed in opening up the Baltic and maintaining control over the narrow passages from the Baltic to the North Sea, the flow of pulp

## COMPARISON OF WOOD PULP IMPORTS January and February, 1940

Type of Pulp	Finland		Norway		Sweden		Canada		Total All Countries	
	Jan.	Feb.	Jan.	Feb.	Jan.	Feb.	Jan.	Feb.	Jan.	Feb.
Mechanical Unbleached	1,118	—	—	—	5,398	2,808	12,683	11,915	19,199	14,723
Unbleached Sulphite	17,583	—	1,505	140	56,133	45,958	13,397	13,396	91,392	62,499
Bleached Sulphite	5,909	2,913	5,785	4,245	11,760	3,130	25,103	22,616	48,887	33,610
Unbleached Sulphate	15,972	5,840	2,946	1,776	55,562	25,626	4,878	5,508	79,358	38,750
Bleached Sulphate	1,303	—	—	—	15,258	4,446	5,444	4,001	22,005	8,447
Soda	—	—	—	—	—	—	1,330	798	1,330	798
Total	41,885	8,753	10,236	6,161	144,111	81,968	62,835	58,234	262,171	158,827
Per cent of change from previous month	—7%	—79.1%	+1%	—39.8%	+51.5%	—43.1%	—14%	—7.3%	+11.8%	—39.4%

Source: U. S. Department of Commerce, Bureau of Foreign & Domestic Commerce.

## IMPORTS OF WOOD PULP INTO THE UNITED STATES

	February, 1940 Tons	February, 1939 Tons	1940 over 1939
Finland .....	8,753	11,065	-20.9%
Norway .....	6,161	3,308	+86.2%
Sweden .....	81,968	54,150	+51.4%
Canada .....	58,234	34,860	+67.1%
Total (four countries) .....	155,116	103,383	+50.4%

Source: U. S. Department of Commerce, Bureau of Foreign & Domestic Commerce.

from Sweden and Finland is likely to be resumed.

At the moment there are too many "ifs" to permit the drawing of any sound conclusions.

Since the first of the year the production of paper and board has declined to around 81 per cent of capacity for paper and 67 per cent for board. Scandinavian pulp was still coming in in large quantities so the pulp buying mills began to feel more secure. This sense of security was quickly replaced by a feeling of fear when Germany invaded Denmark and Norway. In the week before this action on the part of Germany American pulp mills had been asked by some of the converting mills if they could postpone part of their orders as they weren't as busy as they had been a short time ago. Now these requests have stopped.

In several regions of the country price wars on paper and board were in the making for some mills which were short of orders and were willing to shade prices to get it. These tendencies are said to have stopped suddenly for the paper and board mills don't want to be caught in the middle of a price war by rising pulp prices which they naturally expect if the Scandinavian supply is shut off for any length of time.

## Pulp Exports

● Exports of wood pulp from the United States in February totaled 27,754 short tons valued at \$1,327,370 according to the Bureau of Foreign & Domestic Commerce, U. S. Department of Commerce. This total was the highest of any month since December, 1938, and compared with 15,713 short tons valued at \$852,862 in January of this year. In February, 1939, pulp exports amounted to 5,748 short tons of a value of \$224,419.

For the first two months of 1940 exports of wood pulp totaled 43,467 short tons valued at \$2,180,232 as compared with 12,032 short tons valued at \$511,539 in the first two months of 1939.

The pulp exports in February consisted of 5,383 short tons of rayon and special chemical grades valued at \$352,108; 5,440 short tons of other bleached sulphite valued at \$296,501; 5,177 short tons of unbleached sulphite worth \$222,147; 8,925 short tons of unbleached sulphate pulp worth \$307,527; 2,154 short tons of bleached sulphate valued at \$123,281; 421 short tons of screenings and other pulp of a value of \$10,795; and, 254 short tons of soda pulp worth \$15,011.

From the State of Washington 13,520 short tons or 48.7 per cent of the total February pulp exports

of 27,754 short tons, was shipped. The value of the pulp shipped from Washington amounted to \$717,618 or 54 per cent of the total value export during February, \$1,327,370.

Exports from the Washington customs district consisted of 3,600 short tons of rayon and special chemical grades of bleached sulphite valued at \$225,544; 3,814 short tons of bleached sulphite worth \$188,337; 3,333 short tons of unbleached sulphite valued at \$154,921; 464 short tons of unbleached sulphate pulp worth \$23,673; 2,154 short tons of bleached sulphate pulp valued at \$123,281; and, 155 short tons of screenings and other wood pulp valued at \$1,862.

Smiley Dies  
In Pomona

● Mr. E. G. Smiley, purchasing agent for the California Fruit Wrapping Mills, Inc., of Pomona, Calif., died March 30 in Pomona. He had been with the company 13 years and was only 39 years of age. He is survived by his widow and 11-year-old son, Wayne, and 4-year-old daughter, Janet. Funeral services were held April 3.

Willis Hunt Dies  
In Los Angeles

● Willis G. Hunt, co-founder of the Pioneer Paper Co. in the late eighties in Los Angeles, retired since 1928, passed away March 23 at his Los Angeles home. Mr. Hunt was 77. He has been extremely active in civic and business life in the city. The Pioneer Paper Company is now the Pioneer Division, The Flintkote Company.

Wheelock Awarded  
10-Year Service Pin

● Frank Wheelock, chemist at the Vernon Division, Fibreboard Products, Inc., was awarded his ten-year service pin early in April.

## COMPARISON OF WOOD PULP IMPORTS

December, 1939, and January, 1940

Type of Pulp.	Finland		Norway		Sweden		Canada		Total All Countries	
	Dec. '39	Jan. '40	Dec. '39	Jan. '40	Dec. '39	Jan. '40	Dec. '39	Jan. '40	Dec. '39	Jan. '40
Mechanical Unbleached .....	1,699	1,118	56	—	7,606	5,398	21,104	12,683	30,465	19,199
Unbleached Sulphite .....	11,603	17,583	929	1,505	38,182	56,133	15,505	13,397	87,638	91,392
Bleached Sulphite .....	7,263	5,909	6,402	5,785	5,871	11,760	25,905	25,103	46,215	48,887
Unbleached Sulphate .....	22,465	15,972	2,710	2,946	38,342	55,562	5,279	4,878	78,493	79,358
Bleached Sulphate .....	2,124	1,303	—	—	5,108	15,258	4,134	5,444	11,366	22,005
Soda .....	—	—	—	—	—	—	1,281	1,330	1,281	1,330
Total .....	45,154	41,885	10,097	10,236	95,109	144,111	73,208	62,835	235,458	262,171
Per cent of change from previous month .....	+66%	-7%	-36.7%	+1%	-36%	+51.5%	+0.24%	-14%	-13.5%	+11.8%

Source: U. S. Department of Commerce, Bureau of Foreign & Domestic Commerce.

Note: This table has been corrected in accordance with Bureau of Foreign & Domestic Commerce data as of April 15, 1940. The preliminary report for December showed imports of unbleached sulphite from Sweden amounting to 58,182 short tons. The corrected figure is 38,182 short tons. All totals and percentages have been adjusted accordingly.

## Genuit Elected Vice-President California Fruit Wrapping Mills

● Mr. F. O. Fernstrom, president of the California Fruit Wrapping Mills, Inc., of Pomona, Calif., announced the election of Mr. J. W. Genuit, sales manager, to the post of vice-president and sales manager. Mr. J. E. Maurer, treasurer of the company, was also made a vice-president. Mr. Maurer is re-organizing the purchasing department and taking over the duties left vacant by the passing of E. G. Smiley. Mrs. Catherine Calhoun is assisting Mr. Maurer in this work.

## Romona Completes

### Regrinding Yankee Cylinder

● The regrinding of the Yankee at California Fruit Wrapping Mills, Inc., of Pomona, Calif., was completed the latter part of March in three weeks' time instead of the five-week period that it was anticipated it would take. The representatives of the Beloit Iron Works, of Beloit, Wisc., who came to do the work, were surprised to find the unit in such good shape, inasmuch as not one blow hole was found in the inspection for grinding.

## Western Wax Completes Portland Addition

● The Western Wax Paper Co., division of Crown Zellerbach Corp., has just completed a new addition to the plant at North Portland. The building is 130x150 feet in size, one story high and is of reinforced concrete and heavy mill construction. It has steel sash, an automatic sprinkler system and similar modern features.

The added space will be used as a warehouse and some of the operating equipment in the gumming division will be moved into it. No additional production equipment is contemplated at this time.

C. L. Dilling is manager of the North Portland division.

## Wind Damages Spaulding Stacks

● A high wind which whipped through western Oregon the latter part of March caused considerable damage in the pulp mill of the Spaulding Pulp and Paper Co. at Newberg, Oregon, and put the mill out of production for several weeks. The wind blew down both power plant stacks, one of which fell across a bank of transformers, damaging them and the building in which they were housed. This was the major damage caused, but was sufficient to shut the plant down completely. The stacks are being rebuilt and plans were to start operations again about April 15.

Up to time of this accident the plant had been running full time and operations will be on the same basis when resumed.

The company has contracted for a new 600-hp. boiler for installation in the power plant, in order to increase steam supply and assure an ample reserve. Other work being done includes rearranging of the splitters in the wood room for greater efficiency.

## Powell River Installs Bauer Refiner

● Powell River Company has installed a Bauer refiner designed to promote economy in production.

In the ordinary course of operations a small percentage of the wood pulp passing daily into the grinding machines escapes complete mastication. During the day's operations, coarse bundles of fibres, not fully refined, escape the grinding process. These fibres are naturally rejected as too coarse for newsprint purposes.

Under the Bauer process the more suitable of these bundles of coarse fibres may be refined and broken up, and so rendered usable. It is expected that several tons of fibres previously rejected will be reclaimed each operating day.

## North Pacific Paper Mills Organized

● The North Pacific Paper Mills of 404 W. 5th St., Vancouver, Washington, has been incorporated by W. P. Donnelly, W. S. Walton, and T. Osmund. The same is organized to do a general business in the paper industry and according to the articles of incorporation has paid-in capital of \$500.00 and 1,075 shares of non-par common stock.

Amendments to articles of incorporation of the Columbia River paper mills were filed by the Leadbetter interests at the same time. Capital stock was reduced to \$2,000,000 in 20,000 shares of common and \$218,500 in 2,185 shares of preferred stock.

## Humphreys Looks Over Coast Mills

● Hervey P. Humphreys, treasurer of the Dryden Paper Company of Dryden, Ontario, called on Pacific Coast pulp and paper mills the latter part of March.

Dryden manufactures kraft sheathing and kraft and manilla wrapping papers, using its own sulphate pulp, 100 tons per day. Groundwood up to 14 tons is produced, also.

## Pacific Mills Constructing Vancouver Office Building

● Pacific Mills, Ltd., is now constructing a new office building at the company's converting plant in Vancouver, B.C. The structure will be 40x80 feet, a one-story separate building away from the converting plant. It will be of brick wall construction with interior finish of Philippine mahogany wood paneling.

The new office building will be the headquarters of J. A. Young, vice-president and treasurer of Pacific Mills, Ltd. The previous offices in the converting plant will be converted to warehouse space.



**TAPPI CHAIRMEN AT WORK** on plans for the Fall Meeting of National TAPPI which will be held in Seattle, Washington, August 20-23rd inclusive. A committee meeting in Seattle on March 27th. Left to right, BERK A. BANNAN, Chairman Arrangements Committee; FRED SHANEMAN, Secretary-Treasurer Pacific Section of TAPPI and member of the Finance Committee; G. S. BRAZEAU, General Chairman of the Fall Meeting; and, M. B. HOUSTON, Chairman of the Finance Committee.



# Testing of Wood Pulp For Moisture

by O. K. CHAPMAN\*

**I**N the testing of baled pulp for moisture, discrepancies between the tests of the vendor and vendee occur. Such discrepancies constitute a problem in pulp sales which, to say the least, is troublesome, and is not conducive to the most desirable relationship between seller and buyer of wood pulp. It is the author's purpose, in this paper, to show some of the possible sources of error in determining the air dry weight of baled dry pulp.

As far as moisture determinations are concerned, pulp shipments fall into two categories, namely, water shipments, and rail shipments. Water shipments are affected by the length of time in transit and the length of time in dock storage. The time between leaving the pulp mill and arriving at the proper mill is usually a matter of months, and it is quite probable that the pulp has been subjected to wide ranges of temperature and humidity which materially alter the moisture content of the pulp near the surface of the blades.

Rail shipments are seldom in transit for more than two weeks, and changes in temperature and humidity encountered en route will not cause as large changes in moisture content as would be produced in water shipments.

It is obvious that as far as the tests made by the manufacturer before shipment are concerned, the mode of shipment is immaterial. The shipper is concerned only with taking a representative sample of his production, accurately determining its moisture content, and applying the results to an accurate wet weight of his production. He is in an ideal position to do this, and it is clearly evident that methods, personnel, and equipment are available to enable the manufacturer to determine his airy dry production with a remarkably high degree of accuracy. The accuracy attainable will be proportional to the care that is taken and the extent that he is willing to go in sampling, testing and weighing.

\*Pulp Division Weyerhaeuser Timber Company, Everett, Washington. Presented at the Dinner Meeting sponsored by the Pacific Section of TAPPI and held at Port Angeles, Washington, April 9, 1940.

In the author's company, it is the practice to sample across the entire web of the machine at such intervals, depending upon production rate, that every bale is sampled, and to hold bale weights within .05 per cent of the standard weight. Variations exceeding .15 per cent from the standard are rebaled. Thus, it is the writer's contention that the testing of pulp at the destination is subject to errors which will not be encountered when the same pulp is tested under the ideal conditions present at the manufacturer's.

Since the author is located on the Pacific Coast, he is in no position to make an authoritative study of errors encountered in testing of pulp at the termination of water shipments and dock storage. This has been discussed at some length, and supplemented with experimental evidence by Brainerd (Paper Trade Journal 102 No. 10:38-44, March 5, 1936). In his study it was found that the boring method gave higher air dry percentages by approximately 0.4 per cent than those obtained with the wedge method in which the bale was sampled uniformly throughout. It was shown that this difference is caused by the center of the bale being wetter than any part of the bale within three inches of the top. It was further shown by Brainerd that under the conditions of humidity and temperature prevailing when his data was collected that the surface of the bales tend to reach an air dry content between 97 and 99 per cent. Bales being dryer than this will have a tendency to collect moisture on the outside. Data presented by Seborg, Simonds, and Baird (Paper Trade Journal 107, No. 19:45-50) showing the equilibrium moisture content at various humidities, support the conclusion that this is the case under average conditions. At humidities above 80 per cent, the per cent air dry will reach a lower value. Average yearly conditions of humidity in most localities will be about 65 per cent which would cause pulp to seek an air dry per cent of about 100 per cent which is above the usual air dry produced by pulp mills on the

North American continent, although imported European pulp averages about 100 per cent A.D.

The tendency for the outside of the bales to dry out should be more pronounced in shipments from the Pacific Coast than from Europe as the pulp is sometimes subjected to a slightly longer time in transit and at higher temperatures through the tropical climate of the Canal Zone than are European shipments. The above facts lead to the conclusion that the air dry percentage determined at a Pacific Coast mill would be to the customer's advantage, and the figure obtained by sampling at the destination would be to the shipper's advantage.

## Rail Shipments

● In the matter of rail shipments, it is the purpose of this paper to show some of the variables which would affect the results of bored samples taken at the destination. To accomplish this, a study of the moisture distribution across the machine sheet, the moisture distribution lengthwise of the sheet, and a comparison of bored samples to strip samples under controlled conditions, was made.

The moisture distribution across the sheet was determined by taking



**O. K. CHAPMAN**  
Spoke on testing wood pulp for moisture.

sheets from the cutter box across the web of the machine. This was determined on six different machines in the locality. The results are as follows:

% A.D.	Front				Back	
	1	2	3	4	5	
No. 1.....	94.4	90.6	87.7	89.0	92.1	
2.....	97.3	96.6	96.1	97.1	98.6	
3.....	92.2	90.2	90.6	89.4	91.0	
4.....	96.6	94.4	93.1	93.7	95.0	
5.....	92.3	91.0	91.7	92.7	92.4	
6.....	94.3	91.7	91.4	92.8	93.0	

These figures clearly indicate that the moisture content across the web of a machine is usually high in the center and is lower at the edges.

To determine what variation could be expected lengthwise of the machine, from bale to bale, samples were taken as rapidly as possible from each cutter box for a period of one hour. The results are as follows:

	1 (Front)	2	3	4	5 (Back)	
1.....	94.4	96.8	98.8	100.0	98.9	
2.....	95.8	97.4	99.2	101.2	98.0	
3.....	92.8	96.2	99.2	98.3	97.7	
4.....	95.2	96.3	99.3	98.8	99.2	
5.....	92.8	97.2	97.5	100.2	96.1	
6.....	94.3	96.5	98.2	100.3	99.2	
7.....	93.8	97.6	98.7	99.8	98.3	
8.....	94.2	95.8	98.2	99.8	100.4	
9.....	93.0	95.8	97.8	99.0	98.2	
Average.....	94.0	96.6	98.5	99.7	98.4	97.4

The lengthwise variation from bale to bale is as high as 3 per cent.

#### Comparing Strip and Boring Methods

To determine what differences might be expected between a result obtained from a sample taken by the boring method which the consumer would be obliged to use, and a strip sample taken under conditions permitting the sampling of every bale as it is made up, layboys of pulp were taken and a composite strip sample obtained from each bale as the bales were made up. These bales were then each bored in five places at the following intervals after being made up.

a. Immediately

b. After 24 hours

c. After 7 days

d. After 14 days

e. Pulp directly off the machine which was loaded into a car and allowed to remain in the yard for 5 days before sampling.

f. Pulp which had set in the warehouse for 5 days and then in a car for 5 days before sampling.

The results are as follows:

#### a. Bales bored immediately

	1	2	3	4	5	Ave.
% AD Strip.....	96.7	95.1	94.1	94.9	96.9	95.5
% AD Bored.....	96.3	95.1	94.0	95.8	96.7	95.5

#### b. Bales bored after 24 hours

% AD Strip.....	97.7	94.7	93.6	95.4	94.5	95.2
% AD Bored.....	95.9	93.9	93.2	94.3	95.6	94.5

#### c. Bales bored after 7 days

% AD Strip.....	97.6	93.3	92.9	94.0	94.9	94.5
% AD Bored.....	96.3	94.4	93.6	96.8	96.5	95.5

#### d. Bales bored after 14 days

% AD Strip.....	96.0	93.0	91.8	93.0	94.7	93.7
% AD Bored.....	95.1	93.2	91.9	94.3	94.7	93.8

#### e. Bales loaded directly into car and bored 5 days later

% AD Strip.....	95.3	93.1	91.8	92.4	93.8	93.3
% AD Bored.....	95.4	93.9	92.1	93.6	94.8	93.9

#### f. Bales stored in warehouse 5 days then in car 5 days before boring.

% AD Strip.....	96.1	94.1	94.1	94.3	94.5	94.6
% AD Bored.....	96.0	94.2	93.9	95.4	96.0	95.1

set (f) to remain in the warehouse for 5 days before loading, the car was in fine condition five days after it had been loaded.

The time of storage within the limits studied in warehouse or car, under conditions which prevailed, apparently had no effect on the accuracy of the bored samples.

The problem of uniformly spacing bored samples across the web of the machine is quite another matter. The official rules of the Certified Pulp Testers Bureau specify five different points across a bale for sampling. The holes to be bored shall be located so that in five successive bales they will represent a portion extending diagonally across the bale. Each bale is to be bored but once, the first at the corner, the edge of the disc to be one inch from the edge of the bale. The second shall be made halfway between the corner and the center of the bale, the third shall be at the center, and the fourth and fifth in positions corresponding to the second and first. Thus, to obtain a uniform pattern of sampling 25

From these figures, it can be assumed that under these conditions samples obtained by boring are as reliable as the strip samples taken at the time of baling. In most cases, agreement was good as in only one instance did the difference amount to 1 per cent. Set (c) was particularly interesting because when the car was opened, there was considerable moisture condensed on the walls and roof of the car and mold had formed on many of the bales. In spite of this, the moisture content determined by boring was only 0.6 per cent lower than the strip moisture determination. When the bales were allowed, as they were in

Said Mr. Chapman, "One is forced to conclude that in random sampling, in a majority of cases, the average moisture figure obtained will be higher or lower than the true average. However, over a large number of shipments, the average should assume a correct value.

"Therefore we are forced to the conclusion that wherever shipments are reported as short there are other shipments which will be found to be long, provided the boring is done in the standard manner."

borings are required to uniformly sample the web of the machine. In a 208 bale shipment, if 10 per cent of the bales are bored, only 21 borings are made. Obviously, the spacing across the machine will not be uniform. In a series of experiments as to the probable spacing of bored samples made on cards representing bales, no pattern of 10 per cent of the bales fell in a uniform distribution across the machine, as there were always a number of samples bunched around one or more points. One is forced to conclude that in random sampling, in a majority of cases, the average moisture figure obtained will be higher or lower than the true average. However, over a large number of shipments, the average should assume a correct value. Therefore, we are forced to the conclusion that wherever shipments are reported as short, there are other shipments which will be found to be long, provided the boring is done in the standard manner.

The variation lengthwise of the sheet is not as great as it is crosswise of the sheet, but in the above data is as high as 3 per cent, and greater variations have been recorded from hour to hour. It can be seen that with this variation, it would be quite possible for a bored sample to be greatly in error. The only advantage that can be claimed for the strip method of sampling over the boring method in this particular respect is that samples are taken at regular intervals from each bale so that a truer average lengthwise of the sheet will be obtained over a number of bales than by boring at random.

Whether 10 per cent of the bales is sufficient to give a usable average will depend entirely upon the variation which is inherent in the sheet. On any machine's production where the variation follows a regular pattern, it is possible to arrive at a true average by sampling at any frequency, but the less the frequency, the greater the number of samples will be required to reach a true average. In any case, sampling every bale will insure that the results on a 208 bale lot are more reliable than random sampling of 10 per cent of the bales.

### Conclusions

Conclusions from the foregoing discussion may be summarized as follows:

● 1. Bored samples will give correct moisture tests on individual bales if stored under conditions prevailing in this area, and for a period of time up to two weeks. Correct

moisture on a shipment is dependent upon taking enough samples to obtain a true average of the entire shipment.

This should hold for rail shipments from the Pacific Coast, but will not hold for water shipments where the tendency for the outside of the bale to dry out renders a bored sample conducive to low moisture figures.

● 2. The greatest occurrence of error in bored samples is the impossibility of obtaining a uniform distribution of samples across the web of the machine. The strip method of sampling at the cutter-box is free from error in this respect.

● 3. Moisture variations in machine direction will cause error in both strip and bored samples. Strip samples taken at regular intervals are better in this respect than bored samples.

● 4. There is nothing to indicate that high or low results will be obtained by boring, but if they do occur, an average of a number of shipments should reach a correct value.

In conclusion, it must be stated that the best protection against complaints on moisture is a uniform moisture content of the sheet as it leaves the machine.

## Plans Announced For New B. C. Pulp Mill

● Bloedel, Stewart & Welch, one of British Columbia's largest logging and lumber export organizations and for many years an important factor in the Pacific Northwest timber industry, has entered the pulp field, and announces plans for the construction of an unbleached sulphite plant at Port Alberni to operate in connection with the company's sawmill there.

First unit of the mill will have a capacity of 135 tons daily, but it is understood that the plans call for ultimate expansion to several times that tonnage, depending on conditions. Initial investment in the project will be about \$2,750,000.

Entry of Bloedel, Stewart & Welch into pulp production has long been contemplated by the company, and for some time the industry had been expecting definite news of the project.

Announcement that the company was about ready to go ahead with the enterprise was exclusively announced in the last issue of PACIFIC PULP AND PAPER INDUSTRY.

Two factors led to delay until now. One was the litigation in which the company was involved in connection with the destructive forest fire of the summer of 1938 in the Campbell River area. The other was the question of disposing of refuse from the mill in such a way that the Alberni Canal waters, an important fishing area, would not suffer from pollution. It is understood that both these questions have now been effectively dealt with, and that the government departments concerned have been convinced that the salmon run will not be endangered by the mill's operation.

Prentice Bloedel, secretary of the company, has been working for many months on plans for the pulp mill. For a number of months Howard Simons, pulp mill engineer of Chicago, has been drafting detailed plans. Mr. Simons, incidentally, is a son of the late U. D. Simons, the pulp and paper mill engineer who acted

in a consulting capacity for another important British Columbia pulp project, more than twenty years ago, when the Whalens came west from Ontario to establish the mills that later became a part of the British Columbia Pulp & Paper Company setup at Woodfibre, Port Alice and Swanson Bay.

The plant will employ about 150 men, with an additional 125 men in the woods.

There are still a few points to be settled before actual construction will commence. The city of Port Alberni is being asked to grant some concessions with respect to water supply and taxation, but these are expected to be dealt with satisfactorily in time to permit of early building operations.

It is understood that the company plans to bring in most of its water from Sterling Arm, Sproat Lake, by means of a wooden pipe line six miles long.

While the company already has ample acreage for the mill site and waterfrontage property well suited for the pulp plant, considerable dredging may have to be done to provide for an extension of the docking facilities.

Bloedel, Stewart & Welch operates logging camps at Menzies Bay on the east coast of Vancouver Island, at Great Central Lake in the center of the island and at Franklin River near the west coast. It has mills at Great Central and at Port Alberni, the latter being one of the largest in the province, managed by Bruce M. Farris. S. G. Smith is general manager of the whole organization, with head office in Vancouver, B. C. Combined output of the Port Alberni export mill and the rail and export mill at Great Central is the largest in British Columbia. The company also operates two red cedar shingle mills and is the largest logging operator in British Columbia.

The fact that in its normal sawmill operations the company accumulates large volume of hemlock, spruce and other pulping species has made expansion into the pulp field a logical development for the Bloedel organization.



Even before the war the scheme was being quietly discussed by officials of the company, but war-time conditions resulting in the elimination of many north European producers as serious competitors in Pacific and other markets made this seem an opportune time to go ahead with the mill.

The fact that British Columbia Pulp & Paper Company is now concentrating on production of rayon and bleached sulphite pulps left a large demand for unbleached pulp neglected in British Columbia. It was this situation that resulted in Powell River Company and Pacific Mills, Ltd., both entering the unbleached pulp field in a small way this year.

#### Water System Details

● About the only important detail yet to be settled is the water supply. Provided that the taxpayers of Port Alberni approve a plebiscite, the city will finance construction of a 20,000,000-gallon pipe line from Sproat Lake to Port Alberni for the pulp mill.

The city will float a water revenue bond issue for not more than \$225,000 for the purpose, and the Bloedel organization will undertake to dispose of these bonds on terms satisfactory to the municipal department of the provincial government and the city.

They will be 20-year 4½ per cent bonds, serial or amortization as determined, callable after five years in whole or in part at par, and guaranteed as to interest and principal by Bloedel, Stewart & Welch.

The company agrees to operate this line, assume all operating expenses in connection with it, including maintenance, insurance and other charges, and also agrees to pay to the city of Port Alberni an amount equal to the interest and principal retirement requirements of the bond issue, and will, in addition, guarantee bonds to this effect.

In return for this the company will have the sole right to all water delivered in the pipe line. The agreement will be for a period of thirty years and Bloedel will have the option to purchase for \$50,000 at that time.

There will be available to the city for resale from one to three million gallons of water per day during the life-time of the agreement, at the rate of \$12 per million gallons. In addition, a proposed assessment of the company's properties in Port Alberni is expected to bring another \$8000 or \$9000 in annual taxes to the city.

#### Barber Returns From Extended Trip

● W. R. Barber, technical director for the Crown Zellerbach Corporation, returned to Camas March 22 after a trip through the East extending over five or six weeks. After attending the National TAPPI meeting in New York, Mr. Barber visited numerous other pulp and paper centers, including Philadelphia, Carthage, Chicago, Appleton, etc.

#### Weidenbaum Joins Pine Association

● Dr. Bernhardt Weidenbaum has resigned from the staff of the Central Research Department of the Crown Zellerbach Corporation at Camas, and since the first of April has been connected with the Western Pine Association in their Portland laboratory.

#### Camas Bag Warehouse Under Way

● At the first of April the Crown Zellerbach Corp. started construction of an extension of the latest bag storage warehouse at the Camas mill. The new building is 42 feet wide and 170 feet long and will be four stories high. Reinforced concrete construction is being used for the first two stories and the upper two stories are of heavy mill construction. The new warehouse, which will be used for both paper and bag storage, will be finished about the first of June. L. H. Hoffman is the contractor.

#### Bob Heuer Recovering From Illness

● H. R. "Bob" Heuer, shift superintendent, Longview mill, Pulp Division, Weyerhaeuser Timber Company, is recovering from a siege of illness which kept him away from the mill for several weeks.

#### Vernon Breaker Beater Installation Completed

● The breaker beater installation at the Vernon Division, Fibreboard Products, Inc., is now installed and operating. The installation comprises two new breaker beaters with a capacity of 120 tons. They are the product of the Shurtle Brothers Machine Company of Middletown, Ohio. The installation is said to give the Vernon plant the most modern breaker system in the country.

#### Hawley Buys Two Impecos

● The Hawley Pulp and Paper Co. has placed orders for Improved Paper Machinery Company vacuum savealls for both No. 2 and No. 3 machines.

The plant is running on full schedule at the present time, including the water power ground-wood mill in which all water wheels are working.



**FRUIT CRADLE ENDS FLAT SPOTS, BRUISES IN SHIPMENT** ■ ■ ■ A corrugated fibre shipping container for apples and other fruits that cradles the fruit as though it were held between the palms of both hands, providing better protection, won an award for Rainier Fruit Company, Yakima, Washington, and the Yakima Fruit Growers Association, in the Shipping Containers Group of the All-America Package Competition, sponsored by Modern Packaging Magazine.

A superstructure of wood inside the container allows for nailing of the cover, and embodies the features of a bulge box. By transferring the top bulge of the sides, the fruit is cradled; this feature helps to prevent flat spots and bruises from occurring during shipment, and has proved very popular with the dealers. A novel nailing method permits inspection without damage to the appearance of the container. The bottom of the container is sealed by 12 flat wire staples, for greater strength and security during refrigeration.

Although this fibre container may be handled and stacked exactly as was a wooden box, its general appearance is smarter, and it can even be used as a display box.

This container has been received by the trade with such response that Rainier Fruit Company reports that it sold the apples it packed in Fruit Cradles during the past season by February 1st, and that it contemplates increasing the 1940 Cradle pack by several times the number it packed in 1939.

William V. Roberts, of the California Container Corporation, is the designer. His company is the sole manufacturer of this type of container.

# British Columbia Pulp & Paper Holds Annual Meeting

Reports net loss for 1939 of \$147,182—  
Now operating on profitable basis.

● With orders exceeding production and both plants operating at full time, British Columbia Pulp & Paper Company stands to gain substantially from the current revival in pulp demand, President Lawrence Killam told shareholders at the annual meeting in Vancouver late in March.

The company is beginning to profit from its action three years ago when the Woodfibre and Port Alice mills were converted into 100 per cent bleached sulphite and rayon pulp producers to take advantage of what appeared at that time to be a growing world demand for these grades. Unfortunately, the Sino-Japanese war which broke out soon after the \$1,000,000 plant improvements had been completed frustrated the company's efforts to develop the Oriental market and both plants were operated on a greatly curtailed basis until last year.

The Woodfibre plant swung back into production early in February, 1939, and the Port Alice plant remained closed until the middle of June. When they resumed operation no one knew for how long they would continue to produce pulp because at first only a few special orders were on hand to warrant production. However, as the year progressed demand continued to grow and during the latter half of 1939 both mills were running close to capacity.

Provided that no unforeseen change occurs in the marketing situation, the present year is expected to be one of the most profitable in the company's records because the mill has now been fully modernized and production costs reduced materially. The mills are now producing two-thirds rayon pulp and one-third bleached sulphite—both in strong demand, and the company is no longer subject to the extreme competitive factors that prevailed a year ago.

The management of B. C. Pulp hopes that it will not again be necessary to ask bondholders to agree to postponement of interest and sinking fund payments.

Although the 1939 report reflects only in part the improvement that has taken place in the company's affairs, the operating loss of \$42,944 in 1938 was transformed into an operating profit of \$435,055 in 1939. In both years income from investments was put down at \$900.

The 1939 statement provided \$313,642 for partial interest on bonded debt, \$225,000 for depreciation, \$32,295 for legal fees and executive remuneration, \$3,000 for directors' fees and \$9,200 for income taxes.

After these deductions loss for the year was \$147,182, bringing total deficit to \$1,573,855. In 1938, the partial interest payment amounted to \$303,953, legal fees and executive remuneration \$37,633 and directors' fees \$3000. After these deductions the loss for 1938 was reported, before depreciation, at \$386,630.

The balance sheet at the end of last year showed inventories at \$894,364 compared with \$1,050,009 one year pre-

viously. Including inventories, trade accounts (less reserve of \$6,394) at \$1,190,416 and cash at \$13,743, current assets at the end of the year were \$2,098,524.

Current liabilities were \$1,955,054, leaving net working capital at that date of \$525,252.

Changes in current liabilities were: an increase in bank loans (secured) from \$469,462 to \$1,609,000, an increase in wages payable from \$152,370 to \$334,944 and an increase in reserve for taxes from \$7,892 to \$11,110.

Deferred interest on first mortgage 6 per cent bonds at end of 1939 amounted to \$223,831 and on 7 per cent general mortgage bonds to \$733,334. At end of 1938, in addition to deferred interest of \$612,218 on 7 per cent bonds there was a deferred liability of \$700,000 showing in the form of bank time-loans (secured). This does not appear in the 1939 balance sheet, but, as already noted, bank loans as shown in current liabilities were higher by \$1,134,538.

Mr. Killam states that the comparatively high figure of trade accounts receivable shown on the balance sheet is now being regularly reduced, with consequent reduction in the bank's loans.

Referring to the bond situation he added:

"A meeting of the holders of the company's 6 per cent first mortgage gold bonds, held on May 1, 1939, authorized the postponement, until November 1, 1942, of payments of interest due on these bonds May 1, 1939, to November 1, 1940, inclusive, with the right of prepayment of all or part of such interest should the financial position of the company at any time so warrant. At the same meeting, the sinking fund payments due on these bonds in the years 1939, 1940, 1941 and 1942 were cancelled.

"The loss for the year was \$147,181.77 after allowing for interest on bonded debt, and after provision for depletion of timber limits and taxes, and \$225,000 for depreciation. Expenditures during the year charged against reserve for depreciation amounted to \$54,670.19."

## R. B. Wolf Gives Talk Before Industrial Conference

● R. B. Wolf, manager of the pulp division of Weyerhaeuser Timber Company, spoke before the third annual Industrial Relations Conference at Stanford University March 25-29, on "Non-Financial Incentives."

## Cashmore a Coast Visitor

● C. H. Cashmore, president of the Paterson Parchment Paper Co., Bristol, Pa., made his annual visit to the Coast last month, and conferred with W. J. Gray, general manager of the Coast Division of the company in San Francisco.

## Lebanon Running Four Days

● The Crown Zellerbach mill at Lebanon, Ore., is at present running on a reduced schedule due to slowing up of business. The present operating basis is four days per week.

## Bud Johnson In the News

● Lester M. "Bud" Johnson of the engineering department of Weyerhaeuser Timber Co., Pulp Division, at Longview, was recently in the national news when a son was born to his wife on February 29. The unusual thing about it was that the mother was also born on February 29. The chances of this combination are said to be one in several million, there being only about one a year born under the same circumstances.

The event made nationwide news and "Bud" Johnson received fan mail from all over the country.

## St. Helens Constructing New Warehouse

● A new warehouse for paper storage is being built at St. Helens Pulp and Paper Co. According to the president, Max Oberdorfer, the new structure is of frame construction with concrete floor and will measure 115x275 feet.

At the annual meeting of the company February 20 all officers of the concern were re-elected. These included Max Oberdorfer, president; Dr. R. H. Ellis, vice-president; Irving T. Rau, secretary-treasurer, and E. S. Collins, chairman of the board.

## Plan to Correct Volume V

● A second printing of Volume V of "The Manufacture of Pulp and Paper," has been ordered due to the heavy sales of the first printing of the revised volume.

The Joint Textbook Committee desires to be informed immediately of any errors in the third edition which have been noted by men in the industry. Necessary corrections should be addressed to J. N. Stephenson, editor-in-chief, Gardenvale, Quebec.

## CZ and Rayonier Supervisors Hold April Conference

● Crown Zellerbach and Rayonier Incorporated personnel and safety supervisors, and members of the industrial relations staff, headed by A. R. Heron, have scheduled a conference April 17 to 20 inclusive at Portland.

This is the annual meeting of these men at which they discuss personnel and safety problems of both organizations.

## Westminster Paper Reports Increased Income

● Gross sales of \$1,208,506 were reported for 1939 by Westminster Paper Company in the annual report of President H. H. Herb. This compares with \$1,036,542 the previous year.

The record of the company in other respects was also impressive, and important advances were made in almost every division. Net profit, after deductions for costs, administration, depreciation and income taxes was \$142,027, or \$2.97 per share compared with \$87,946 or \$1.84 per share in the preceding year.

As in the previous year, Westminster Paper Company paid 50 cents per share in dividends, and after provision of \$23,895 for the year's dividends an addition of \$118,132 was made to earned surplus to bring surplus balance at January 31, 1940, to \$235,301.

In his annual report Mr. Herb expresses some doubt as to whether the favorable conditions encountered last year will continue for long owing to the uncertainties of the war period, contraction of overseas markets due to import restrictions and other factors.

"It is only reasonable to expect unusual conditions which will adversely affect industry as a whole," states Mr. Herb. "Certain of these factors have been felt at this early date, and we would like to point out at this time that due to our fiscal period ending as of January 31 the company escaped application of the war taxes which will be effective next year."

"Attention is being given to reducing expenses wherever possible so that operating costs will place the company in a position to face any contingency that may arise."

Increase in earnings was responsible for an increase in net working capital of more than \$100,000. An immediate increase in dividends is not contemplated by the directors as it is planned to continue the use of surplus funds for expansion—a policy which in the past has yielded good results in the form of increased business and earnings.

The substantial increase in net current and working assets explains how the company found it possible to call the last of its outstanding 6½ per cent debentures as at April 1, and to arrange for their redemption chiefly from funds on hand, supplemented by a small current loan.

The balance sheet as at January 31, 1940, shows \$204,500 in bonds outstanding of which \$110,000 was held in sinking fund, leaving the net amount at \$94,500.

Calling of the bond issue on April 1 meant elimination of the last item of uncontrollable expense. The company is prepared therefore to face the problems of the future, according to Mr. Herb, safeguarding shareholders' investment as far as possible while contributing to Canada's war effort.

Following is a summary of results of the past two years:

Profit and Loss Account	12 Mos. Ending	
	Jan. '40	Jan. '39
Sales, less disc. & allowances	\$1,164,622	\$1,021,709
Less: Cost of sales	817,381	739,140
Gross profit	347,241	282,569
Deduct: Selling and other exp.	93,116	99,760
Profit before depr., int. on debts. and inc. tax.	254,125	182,809

Deduct:		
Depreciation	54,958	52,338
Int. on debts.	6,889	8,025
Premiums on deb. redemp. (net)	251	
Provision for inc. taxes	50,000	34,500
	\$ 112,098	\$ 94,864
Net profit for period	142,027	87,946
Earned after all charges per sh.	2.97	1.84
Paid on common per share	.50	.50
Current assets	405,282	288,199
Current liab.	136,391	121,017
Working capital	268,891	167,182

From these figures it will be shown that despite considerable increase in volume of business and administrative expenses at \$93,116 the total was \$6000 less than in 1938. The fixed charges on the funded debt have been growing less year by year through retirement of debentures from sinking fund and this outlay will be eliminated during the current year.

The balance sheet reflects net addition to capital assets to the amount of \$36,058 during the year following net addition of \$70,910 in the preceding year. After the year's provision for depreciation, however, capital assets are carried at \$611,728 against \$630,435 in the preceding statement.

The statement shows the company's investment in the Bellingham subsidiary, Pacific Coast Paper Mills Company, Inc., was increased during the year from 20,045 shares carried at \$6,375 to 30,824 shares carried at \$17,910.

Included in current and working assets were inventories at \$184,003, an increase from \$100,207 one year previously. Of the January 31, 1940, total, \$32,134 represented manufacturing products and \$151,869 goods in process and raw materials and supplies.

Bills and accounts receivable were \$175,709 against which was a reserve of \$4,108 for doubtful accounts. Cash value of life insurance to the amount of \$22,151 and cash at the bank and on hand make up the total of \$405,282 in current and working assets.

Of the 50,000 authorized shares of \$10 par, issued shares remain the same at \$47,789.

## Pulp and Paper Men Attend Stanford Conference

● A number of Rayonier and Crown Zellerbach men attended the recent third annual Industrial Relations Conference of the Graduate School of Stanford University at Palo Alto, held March 25 to 29.

Among those present were L. R. Gault of the Western Transportation Co., Portland; P. F. Middlebrook, resident manager at Lebanon; J. W. Bagwill, personnel manager at the Grays Harbor division; R. H. Williams of Shelton; S. W. Grimes of Port Angeles; Otto R. Hartwig, social security consultant of Portland; J. A. Ream of West Linn; Martin L. Mammen, safety supervisor of Portland; Miles Murray and P. D. Duignan of San Francisco.

## Oberdorfers Visit Southern California

● A visitor in the southwest during Easter week was Max Oberdorfer, president of the St. Helens Paper Co. Mr. Oberdorfer was accompanied by Mrs. Oberdorfer and his two sons, Max Jr., and Carl. The Oberdorfers drove, including Death Valley resorts and San Diego in their trip.

## Inter-Mill First Aid Contest Scheduled for Portland

● The third annual inter-mill first aid contest between Fibreboard Products, Inc., Rayonier Incorporated and the Crown Zellerbach Corporation, is scheduled for Saturday, April 20, in the State Armory at Portland at 7:30 p. m.

First aid teams will be entered from the following mills: Rayonier Incorporated at Hoquiam, Shelton, Tacoma and Port Angeles; Fibreboard Products, Inc., at Port Angeles; Crown Zellerbach, Inc., divisions at Port Angeles, Port Townsend, West Linn and two teams from Camas.

Fred Pontin, first aid instructor for the Washington State Department of Labor and Industries, will officiate as chief referee and judge of the contest.

A banquet luncheon will be held for team members and guests at 1:30 p. m. at the Portland Hotel on Saturday. Officials in charge of the contest are:

Committee in Charge of Arrangements: chairman, R. H. Williams, Rayonier Incorporated, Shelton; E. P. Read, Washington Pulp & Paper Co., Port Angeles; J. A. Ream, Crown Willamette Paper Co., West Linn, Oregon; J. F. Robertson, Crown Willamette Paper Co., Camas, Washington.

Chief Judge and Referee: Fred Pontin, first aid instructor, Dept. of Labor and Industries of State of Washington.

Timekeepers: H. S. Sanderson, Sanderson Safety Supply Co., Seattle; H. M. Croner, Crown Willamette Paper Co., Lebanon, Oregon; S. W. Grimes, Rayonier Incorporated, Port Angeles, Wash.

Recorders: W. C. Crait, Rayonier Incorporated, Tacoma, Washington; S. J. Coney, National Paper Products Co., Port Townsend, Washington; T. J. Kepner, Crown Willamette Paper Co., Cathlamet, Washington; R. A. Lawrence, Fibreboard Products, Inc., Port Angeles, Washington.

## Camas Men Receive First Aid Certificates

● A meeting of the first aid class graduates of the Crown Willamette mill at Camas was held Thursday, April 11, in Crown Willamette Inn. At the banquet gathering certificates of graduation were presented to the class members.

## Weyerhaeuser Displays Products From Pulp

● An attractive display of paper products made from western pulp is now located in the lobby of the Weyerhaeuser Timber Co., Pulp Division offices, at Longview. In the show cases are such products as cards of various types, milk bottle tops, bathroom tissues, milk bottles, etc.

## Ostenson After Fishing Prize

● H. E. "Heinie" Ostenson, paper mill superintendent for the Crown Zellerbach Corporation at Camas, is reported to be laying plans to be the Number One man in the Columbia River Salmon Derby during April. His reputation as a fisherman should be a warning to all comers.

It is also understood that A. G. "Buff" Natwick, assistant mill manager, is polishing up his tackle for the fray and is going to keep his eye on "Heinie's" technic.





### Mead Glad It Has Brunswick Investment

● The Mead Corporation in 1940 will make an additional investment of \$200,000 in the Brunswick Pulp & Paper Company, owned jointly with the Scott Paper Company. The capacity of the Brunswick mill will be increased by 25 per cent.

"The effect of this investment will be not only to provide additional pulp for Mead Corporation, thus further reducing dependence upon purchased pulps, but also to lower the cost of all pulp produced by the Brunswick plant," George H. Mead, president of Mead Corporation says.

"In view of the extremely unsettled condition of affairs in the Scandinavian countries, from which we still purchase a minor portion of our pulps, our Brunswick investment should prove of even greater importance and value to the corporation than was anticipated when the plant was conceived."

### Hazelquist Returns From Australian Trip

● Svaare Hazelquist, chief chemist for the Weyerhaeuser Timber Co., Pulp Division, is back in Longview after spending six months in Australia where he worked with the Australia Paper Manufacturers, Ltd. He was loaned by the Weyerhaeuser organization to help start up the new pulp mill.

### Paper From Joshua Trees—An Old Idea

● Bruce F. Brown, Sr., resident manager of the Vernon Division, Fibreboard Products, Inc., in reminiscing about a hunting trip of twenty years ago, brought to light an interesting bit of history relating to paper making that occurred in southern California. Mr. Brown and his brother, Murray, frequently went hunting for rabbits on the Mojave desert. On the occasion Mr. Brown recalled they had left Los Angeles in time to spend the night at Lancaster intending to be out early the next morning after the long ears. Next morning they found their radiator frozen and during the delay caused by this struck up a conversation with an old man who ran a boarding place. On telling the old gentleman that they were paper men, his face lighted and he became very animated telling them that he had been a paper man in England. Briefly his story was that he had been sent to the desert country in the seventies by an English paper company to obtain Joshua trees, a member of the Yucca

family which grows to heights of 30 feet and over. Experiments then had indicated that this tree provided a fibre for paper pulp equal to the Esparto grass brought to European mills from Spain and North Africa and used with good success. The frequently fatal charm of the desert settled on the old gentleman and he never returned to England. The difficulty of obtaining Joshua trees and its relative scarcity limited further use of it for paper, although occasionally the idea occurs to someone and some efforts are made to do something about it.

### Cigarette Paper Mill To Expand Production

● Reception by cigarette manufacturers of the new domestic cigarette paper made by the Ecusta Paper Company, of Brevard, N. C., has been so satisfactory that the company's mill will be expanded 50 per cent over original plans, according to Henry B. Straus, president. Production started on September 3, 1939, and the company is now employing 900 and operating four large paper machines 24 hours a day, he said.

### Opportunities for Canadian Paper In Australia

● There are better opportunities for the sale of certain grades of Canadian paper in Australia now than ever before, according to R. P. Bower, assistant Canadian trade commissioner at Sydney in a report to the Canadian department of trade and commerce.

Mr. Bower points out that supplies from Germany and German-occupied countries have ceased entirely, he says, while deliveries from Scandinavian countries are uncertain due to hostilities. Australian importers are prepared to pay more for Canadian papers than for Scandinavian or English, because of the relative certainty of regular arrivals.

While a portion of the displaced lines will be taken up by countries which are not likely to be greatly influenced by the war in Europe, "it is to Canada that the bulk of the users are turning for their future requirements," states Mr. Bower.

War conditions have created an opportunity for Canadian paper mills. With the increased volume of trade they may obtain in the Australian paper market, reductions in costs are possible which may make Canadian papers more competitive with European types when conditions return to normal.

"Canada has secured practically the entire newsprint field for the time being under a long term contract so that it is in other paper types that the principal interest lies," says Mr. Bower.

### March Newsprint Production Up

● Production in Canada during March, 1940, amounted to 251,279 tons and shipments to 235,304 tons, according to the News Print Service Bureau. Production in the United States was 85,143 tons and shipments 86,930 tons, making a total United States and Canadian newsprint production of 336,422 tons and shipments of 322,234 tons. During March, 19,527 tons of newsprint were made in Newfoundland, so that the total North American production for the month amounted to 355,949 tons. Total production in March, 1939, was 325,386 tons.

The Canadian mills produced 104,473 tons more in the first three months of 1940 than in the first three months of 1939, which was an increase of sixteen and six-tenths per cent. The output in the United States was 22,663 tons or nine and nine-tenths per cent more than in the first three months of 1939. In Newfoundland production was 11,035 tons or fifteen and nine-tenths per cent more, making a total increase of 138,171 tons, or fourteen and nine-tenths per cent more than in the first three months of 1939.

Stocks of newsprint paper at the end of March were 212,737 tons at Canadian mills and 15,815 tons at United States mills, making a combined total of 228,552 tons compared with 214,364 tons on February 29, 1940, and 226,047 tons at the end of March, 1939. During the winter some tonnage was accumulated at points from which water shipments will later be made.

### Hyde and Holzer Make Eastern Trip

● James B. Hyde of the Crown Zellerbach Central Research Department, Camas, went east early in March, attending the National TAPPI meeting and visiting mills. Dr. Walter Holzer of the same went to the Institute of Paper Chemistry about the same time, visiting there together with Director W. R. Barber.

### Norman Kelly Building His Own Boat

● W. N. Kelly, manager of the Longview mill of the Weyerhaeuser Timber Company, Pulp Division, who is an enthusiastic and veteran sailor, is now building a 31-foot knockabout motor sailer. He is doing much of the work himself and expects to have it finished later this year.

### Crown Golf Season In Full Swing

● The first gathering of the season was held by the Crown Willamette Golf Club on Thursday, April 4, when the pulp and paper making golfers held their first matches at the Orchard Hills Golf Club. The play was followed by a dinner at the club. The regular tournament play will start in a few weeks.

### Visitors at Vernon

● Fibreboard Products, Inc., Vernon Division, reported its list of visitors during February and March to include C. P. Hall of Akron, O.; Harry Stilwell of the Albany Felt Company; George Truckell of the firm's head office; R. H. Shainwald, Paraffine Companies, San Francisco; Isadore Zellerbach of Fibreboard Products Inc., and Crown Zellerbach Corp; Bob Petrie of Black-Clawson, and Shartle Bros., Portland; Bill McLaughlin, Herb Vernet, Staley Corp., Decatur, Ill.; Ed Farina, of the firm's head office; Bill Williamson, Shuler & Benninghofen, Portland; Cash Whipple, Beloit Iron Works, Beloit, Wis.; Ralph Waldo, National Aniline & Chemical Co., San Francisco; Don Little, Antioch; Dave Jordan, F. C. Huyck Co., Albany, N. Y.; John Fulton, Pacific Supply Co., San Francisco; Ernie Kertz, Portland, and Reynolds McHenry of L. S. Rose-ner's San Francisco office.

## TAPPI Discusses Pulp Moisture Testing

THE sixth and last of the 1939-1940 dinner meetings sponsored by the Pacific Section of TAPPI was held on Tuesday evening, April 9th at the Port Angeles Country Club, Port Angeles, Washington. Approximately 70 men attended.

Chairman N. W. Coster, who presided, announced that the dinner meeting scheduled for May 7th in Vancouver, B. C., had been cancelled due to conditions brought about by Canada's entry into the war. He said that the change was made with regret but that both Canadian and American members of TAPPI thought it best to call the meeting off for this year.

The next meeting of the Pacific Section, said Chairman Coster, will be the National Fall Meeting to be held in Seattle, August 20-23rd, 1940. Neither TAPPI nor the Superintendents will hold a meeting in June as is normally the custom.

"Pulp Moisture Testing," was the title of a paper presented by O. K. Chapman of the Pulp Division, Weyerhaeuser Timber Company, Everett, Washington, in competition for the annual Shibley Award. Mr. Chapman's paper is published in this issue. A lengthy discussion followed Mr. Chapman's presentation.

The second paper scheduled for presentation at Port Angeles was "Quality Requirements in Lime for Pulping and Bleaching," by R. S. Painter of the United States Gypsum Company, Portland. Chairman Coster stated that as Mr. Painter found it impossible to present his paper at this meeting Mr. R. E. Chase of R. E. Chase & Company, Tacoma, Washington, had kindly consented on short notice to lead a discussion of the application of the Rotameter for measuring the flow of gases and liquids. Mr. Chase brought laughter when he said he had consented to lead the discussion because he knew very little about the Rotameter's applications and he hoped he would learn much from the discussion.

He said the Rotameter was accurate throughout a wide range in measuring the flow of gas or liquids; that it was accessible for cleaning; that there was no wear as the revolving meter did not rub against the accurately machined glass tube;

and that it would handle hot or cold liquids at pressures ranging up to 1500-2,000 pounds.

For measuring opaque liquids an indicating rod is employed which extends through an elbow in the glass tubing. This indicating rod is connected with another rod freely moving in a magnetic field created by a coil. The up and down movement of the Rotameter element pulls the rod in and out of the coil varying the flow of electric current to a Brown recorder.

The question arose concerning the measuring the flow of liquid chlorine. Mr. Brian Shera, service engineer of the Pennsylvania Salt Manufacturing Company of Washington, Tacoma, stated that such an installation was in operation and had been successfully employed for some time. He described the installation which employed compressed air on the chlorine cylinder being released and a check valve on the far side of the Rotameter to prevent the too rapid expansion of the chlorine and consequent bubbling in the meter.

Another question was raised concerning the possibility of measuring the flow of pulp stock. Mr. Chase said this had not been tried as yet to his knowledge. The matter of fiber friction against the rotating element was discussed and the consensus of opinion was that the fibers might clog the space between the element and the tube unless the element were streamlined.

In concluding the meeting Chairman Coster expressed his appreciation to the members of TAPPI for

their cooperation in staging the six dinner meetings of the present season, and to Vice-Chairman Fred A. Olmsted for his work in preparing the programs.

Mr. Coster also expressed the appreciation of TAPPI to Howard Graham of the Washington Pulp & Paper Corporation, Division of Crown Zellerbach Corporation, who had charge of arrangements for the Port Angeles meeting.

The following men attended the dinner meeting in Port Angeles, Tuesday evening, April 9th:

● Gerald F. Alcorn, Weyerhaeuser Timber Co., Everett, Wash.; Ray C. Austin, Crown Zellerbach Corporation, Port Angeles, Wash.; G. Sterling Bailey, Rayonier Incorporated, Port Angeles, Wash.; C. M. Barr, Cavin, Marshall & Barr, Seattle, Wash.; C. V. Basom, Fibreboard Products, Inc., Port Angeles, Wash.; A. F. Benson, Fibreboard Products, Inc., Port Angeles, Wash.; Paul W. Blatter, Rayonier Incorporated, Port Angeles, Wash.; P. Cannon, Rayonier Incorporated, Port Angeles, Wash.; O. S. Cauvel, Crown Zellerbach Corporation, Port Angeles, Wash.; E. J. Cavanaugh, Fibreboard Products, Inc., Port Angeles, Wash.

● Kenneth Chapman, Pulp Division, Weyerhaeuser Timber Co., Everett, Wash.; R. E. Chase, R. E. Chase & Co., Tacoma, Wash.; N. W. Coster, Soundview Pulp Co., Everett, Wash.; J. V. B. Cox, Paper Makers Chemical Div., Hercules Powder Co., Portland, Ore.; E. F. Drake, Crown Zellerbach Corp., Port Townsend, Wash.; Harold T. Fretz, Rayonier Incorporated, Port Angeles, Wash.; Ben G. Gellenbeck, Keystone Lubricating Co., Tacoma, Wash.; M. S. Gerend, C. C. Moore & Co., engineers, Seattle, Wash.; Wm. R. Gibson, Northwest Filter Co., Seattle, Wash.; George LeRoy Gouker, Rayonier Incorporated, Port Angeles, Wash.

## The Next TAPPI Meeting

The next TAPPI meeting on the Pacific Coast will be the Fall Meeting of National TAPPI which will be held at the Olympic Hotel in Seattle, August 20-23rd inclusive.

An interesting and instructive technical program is now being prepared by Mr. W. R. Barber, Technical Director of the Crown Zellerbach Corporation, who is chairman of the Technical Program Committee.

Reservations should be made early and directly with the Olympic Hotel, Seattle, Washington.

● Howard Graham, Crown Zellerbach Corp., Port Angeles, Wash.; Earl G. Hallonquist, Rayonier Incorporated, Shelton, Wash.; S. H. Harrison, Westinghouse Elec. & Mfg. Co., Seattle, Wash.; Nelson Q. Hartnagel, Fibreboard Products, Inc., Port Angeles, Wash.; W. S. Hodges, Asten-Hill Mfg. Co., Portland, Ore.; Wm. S. Hodgson, Fibreboard Products, Inc., Port Angeles, Wash.; Clyde F. Holcomb, Edison Storage Battery Co., Seattle, Wash.; Robt. Holcomb, Fibreboard Products, Inc., Port Angeles, Wash.

● Judson H. Holloway, Rayonier Incorporated, Shelton, Wash.; A. J. Hooper, Crown Zellerbach Corp., Port Angeles, Wash.; B. L. Kerns, Westinghouse Elec. & Mfg. Co., Seattle, Wash.; Glen King, Crown Zellerbach Corp., Port Angeles, Wash.; R. A. Lawrence, Fibreboard Products, Inc., Port Angeles, Wash.; Don Lawson, Rayonier Incorporated, Port Angeles, Wash.; R. E. Le Riche, Brown Instrument Co., Seattle, Wash.; A. H. Lloyd, Crown Zellerbach Corp., Port Townsend, Wash.; Wm. M. Locke, Crown Zellerbach Corp., Port Angeles, Wash.; Leonard McMaster, Asten-Hill Mfg. Co., Philadelphia, Penn.

● G. T. Mickel, Rayonier Incorporated, Port Angeles, Wash.; Kyle Milligan, Northwest Lead Co., Seattle, Wash.; R. L. Mitchell, Rayonier Incorporated, Shelton, Wash.; F. A. Morey, Crown Zellerbach Corporation, Port Townsend, Wash.; C. T. Mulledy, Rayonier Incorporated, Port Angeles, Wash.; E. E. Olsson, Fibreboard Products, Inc., Port Angeles, Wash.; F. A. Olmsted, Crown Zellerbach Corp., Camas, Wash.; James W. Pence, Rayonier Incorporated, Port Angeles, Wash.; A. S. Quinn, Stebbins Engineering Corp., Seattle, Wash.; Fred Radke, Rayonier Incorporated, Port Angeles, Wash.

● M. L. Rauch, Crown Zellerbach Corp., Port Angeles, Wash.; E. P. Read, Crown Zellerbach Corp., Port Angeles, Wash.; Cliff M. Rogers, Industrial Products Co., Seattle, Wash.; Walter A. Salmonson, Simonds Worden White Co., Seattle, Wash.; Harlan Scott, Pacific Pulp & Paper Industry, Seattle, Wash.; Myron A. Scott, Rayonier Incorporated, Port Angeles, Wash.; A. F. Sheehan, Westinghouse Elec. Supply Co., Seattle, Wash.; Brian Shera, Pennsylvania Salt Mfg. Co., Tacoma, Wash.; E. C. Sherman, Crown Zellerbach Corp., Port Townsend, Wash.; Glenn Simkins, Rayonier Incorporated, Port Angeles, Wash.; H. N. Simpson, Crown Zellerbach Corp., Port Townsend, Wash.; Henry Solbakken, Soundview Pulp Co., Everett, Wash.

● H. A. Sprague, Rayonier Incorporated, Port Angeles, Wash.; H. E. Springer, Rayonier Incorporated, Port Angeles, Wash.; James B. Symonds, Sinclair Wire Co., Seattle, Wash.; Robert S. Tabke, Rayonier Incorporated, Shelton, Wash.; E. H. Tidland, Pacific Coast Supply Co., Portland, Ore.; L. C. Van Arsdale, Rayonier Incorporated, Port Angeles, Wash.; J. V. Venables, Crown Zellerbach Corp., Port Angeles, Wash.; L. E. Warwick, Crown Zellerbach Corp., Port Angeles, Wash.; James W. Wenger, Crown Zellerbach Corp., Port Angeles, Wash.

## Niles Anderson Superintendent St. Regis Kraft Company

● Ossian Anderson, executive vice president of the St. Regis Kraft Company of Tacoma, Washington, subsidiary of the St. Regis Paper Company of New York, recently announced the appointment of Niles M. Anderson as general superintendent. The appointment was effective on January 23rd.

Niles Anderson succeeds William T. Webster who left the St. Regis Kraft Company on the above date and is now in the East. Mr. Webster had served as general superintendent since September, 1936, arriving in Tacoma while the rebuilding and modernization of the plant was in progress. At the same time Mr. Niles Anderson became assistant superintendent.



## NILES M. ANDERSON, Superintendent, St. Regis Kraft Company, Tacoma

Mr. Anderson's experience as an operator has been extensive. Upon his graduation from the College of Forestry at the University of Washington he worked on the construction of the Fidalgo Pulp Manufacturing Company's unbleached sulphite pulp mill at Anacortes, Washington, which is now the Anacortes Division of the Puget Sound Pulp & Timber Company. Later he became assistant superintendent of this plant. While the original Bellingham unbleached sulphite pulp mill of the Puget Sound Pulp & Timber Company was being built (then the San Juan Pulp Manufacturing Company) he was transferred there and served as sulphite superintendent, installing the machinery and starting up the mill.

In 1927 Mr. Anderson went to Ocean Falls, B. C., as sulphite superintendent for Pacific Mills, Limited. His work there included supervision over both the sulphite and sulphate pulp mills. He remained at Ocean Falls for five and one-half years and was then transferred to the Camas, Washington, mill of the Crown Willamette Paper Company as night superintendent. After a short time he moved to Vancouver, Washington, and became sulphite superintendent of the Columbia River Paper Mills. He was at Vancouver for more than three years

in charge of groundwood manufacture as well as sulphite production before leaving to join St. Regis Kraft Company at Tacoma. Mr. Anderson is a member of the International Forestry Society and of Xi Sigma Pi, honorary forestry fraternity.

He is also a member of TAPPI and of the American Pulp & Paper Mill Superintendents Association. Last December he was elected first vice chairman of the Pacific Coast Division of the superintendents association.

## Staple Fiber Imports Decline in February

● "Imports of rayon staple fiber in February amounted to only 2,601,000 pounds which is 49 per cent below the 5,087,000 pounds imported in January and is the lowest month since December, 1938," states the Rayon Organon for April.

The publication commented, "The large amount of Japanese staple fiber imported in January has excited considerable comment in the market. One theory is that the Japanese hastened to get their staple fiber into the country before the expiration of the trade treaty in January. Ostensibly this action was taken because the Japanese feared the possibility of special duty rates being placed on Japanese imports into this country. It is interesting to note that in February Japanese staple fiber imports declined to 289,000 pounds. Whether or not this theory is correct will be seen by the import data of the next several months."

## Gob Des Marais Visits Northwest Paper Mills

● H. A. "Gob" Des Marais, Pacific Coast Manager of the General Dyestuff Corporation, visited the paper mills in the Pacific Northwest the middle of April. For the past two years Mr. Des Marais has been located in San Francisco but formerly lived in Portland.

For several years he was secretary-treasurer of the Pacific Coast Division of the American Pulp & Paper Mill Superintendents Association. Mr. Des Marais is also a member of TAPPI and is chairman of the reception committee for the Fall meeting of National TAPPI which is to be held in Seattle August 20-23rd inclusive.

When Mr. Des Marais was transferred to San Francisco two years ago he was succeeded in Portland by Robert M. True who came west from Minnesota. Mr. True is convalescing at his home in Portland from a tonsillectomy.

## Soundview Sets New Production Record in March

● The Soundview Pulp Company of Everett, Washington, set a new high record for monthly production in March with 15,388 tons. This compares with 14,354 tons produced in February and 7,099 tons in March, 1939. First quarter production was 43,265 tons compared with 22,315 tons in the first quarter of 1939.

Sales in March totaled 16,167 tons almost equal to the record set in February of 16,225 tons. In March, 1939, only 7,905 tons were sold. Sales for the first quarter totaled 46,946 tons against 21,445 tons in the same period of 1939.

Profit for the first quarter amounted to \$537,036 equal to \$1.03 a share on the common, compared with a net profit of \$54,385 or 5 cents a share on the common in the first quarter of 1939.



# Harbor Man Makes Unusual Offer for Pulp Mill

Neil Cooney, President of the Grays Harbor Commercial Company, offers free tidewater mill site of 530 acres and choice of 2,300 acres of timber or \$100,000 cash to any company agreeing to build a pulp mill—Sole strings attached are that company must include "Grays Harbor" in its name.

● The people of Grays Harbor have long wanted a second pulp mill to utilize the hemlock timber tributary to the district. Conditions international, national and local have at one time or another operated to prevent their realization of this objective.

One of the Grays Harbor citizens most interested in building up permanent industries in the region is Neil Cooney, a resident of the district for more than 50 years, and president of the Grays Harbor Commercial Company. Some years ago this company owned and operated the largest sawmill on the harbor at Cosmopolis, Washington, but the plant burned and was never rebuilt. The mill site on the Chehalis River which empties into Grays Harbor has been cleared of debris and awaits a new industry that wants deep water shipping adjacent to timber supplies.

Last month Mr. Cooney made a public spirited move. With the buyers of wood pulp looking toward the Pacific Northwest for a greater proportion of their supplies than ever before due to war in Europe, he felt it was timely for Grays Harbor to make an attractive offer for another pulp mill.

To any organization guaranteeing to start construction of a pulp mill within six months' time Mr. Cooney offered these inducements: (1) a cleared site of 530 acres fronting on the Chehalis River deep enough for ocean going freighters after a little dredging which has not been done since the sawmill burned; (2) 2,345 acres of fine hemlock and spruce timber located within a radius of 5 miles of Cosmopolis, or (3) in lieu of the timber Mr. Cooney will give the pulp mill organization \$100,000 in cash. His only stipulation is that the company include "Grays Harbor" in its corporate name.

Inquirers looking for a "catch" in the offer could find none. It is understood that the offer of \$100,000 is without strings and Mr. Cooney does not expect stock in return for the gift.

The question of a sulphite pulp mill obtaining a permit to discharge waste liquor has been brought up. It is understood that one solution acceptable to the Washington State Department of Fisheries would be the dumping of the liquor into two sloughs and held in check by diking gates. The Department of Fisheries is interested only in preventing further pollution of the Chehalis River. A sulphate pulp mill would, of course, find the matter of waste disposal far easier than a sulphite pulp mill.

To manufacturing concerns seeking new locations the matter of taxes is highly important. On this subject the Grays Harbor Washingtonian, published in the adjoining city of Hoquiam, had this to say in an editorial published March 26th:

"In the matter of sites for industries Grays Harbor today is in better position to obtain new industries than ever.

"Also, Grays Harbor today has another advantage to offer new factories and that is her low tax rate. Taxes on real estate on Grays

Harbor are lower now than they have been in years and promise to be even lower in succeeding years, for most of the local taxing bodies are largely out of debt.

"Aberdeen and Grays Harbor county are on a cash basis and Hoquiam is practically so. The Hoquiam school district and the port of Grays Harbor are out of debt. The county is practically so. Several of these units have cash balances instead of outstanding bonds. There will be less interest to pay in the future than in the past. That means still lower tax rates. Lower tax rates mean substantial savings for large enterprises. Such savings make prospects for profits better.

"Grays Harbor in her cheap factory sites and low tax rates has something to sell to those seeking locations for industries."

With the European war moving into Scandinavia, the chances of Mr. Cooney's offer being taken up at an early date appeared bright at the time of going to press.

## Container Firms Merge Organizations

● On April 10th the merger of Western Containers, Incorporated, of Seattle and California Container Corporation of Emeryville, California, was announced by Wil Evans, vice-president and general manager of the merged companies. Mr. Evans' headquarters are in Emeryville but he made the announcement while on a visit to Seattle.

The amalgamation, Mr. Evans said, will result immediately in improved service to customers in the Northwest and in California, and will make the combined organization the second largest manufacturer of corrugated fiber shipping containers on the Pacific Coast.

Earl B. Stark is sales manager of Western Containers, Incorporated, and Matthew Munce is superintendent.

## Set Dates for Camas Paper Festival

● The Camas, Washington, paper festival has been set for July 26th and 27th.

An elaborate program is being planned which will include open house at the mill of the Crown Willamette Paper Company, Division of Crown Zellerbach Corporation.



NEIL COONEY  
Makes an offer  
for a pulp mill

## Puget Sound Issues Annual Report

● The annual report of the Puget Sound Pulp & Timber Company with unbleached sulphite pulp mills at Bellingham and Anacortes, Washington, showed a net profit of \$98,595 for 1939. The preliminary report published in the March issue indicated a net profit of \$80,307.

The 1939 net profit of \$98,595 was after all charges including depreciation, interest, and federal income taxes, and was equal to approximately 80 cents a share on 123,637 shares of \$20 par value 6 per cent cumulative preferred outstanding. In 1938 Puget Sound reported a consolidated net loss of \$17,535.

The improvement in the company's position is partly indicated by the increase in sales of pulp in 1939 to \$3,027,501 from \$1,765,720 in 1938. Production of wood pulp in 1939 totaled 94,416 tons and sales were 96,485 tons. This year's production is almost entirely sold according to the report. Approximately 75 per cent has been contracted for by United States buyers on a quarterly price adjustment basis.

● "Experience with the Bellingham plant has been particularly satisfactory from the standpoint of capacity output," Ossian Anderson, president, said. "The projected capacity of this plant when built was 240 tons per 24 hours. This output was reached after a few months of operations, and during 1939 was increased to 275 tons per day or 15 per cent over the capacity for which the plant was originally designed. . . . Cost of manufacture is substantially below estimated costs on which the plant was originally planned, and a high quality of product is maintained."

Balance sheet as of December 31, 1939, shows total current assets of \$715,609, including cash of \$53,785, compared with current liabilities of \$446,056, indicating working capital of \$269,553, and a current asset position of 1.6 to 1. A year earlier total current assets were \$537,798, including cash of \$200,944, and current liabilities totaled \$459,733, leaving indicated working capital of \$78,065, and a current asset ratio of 1.17 to 1. Inventories were slightly higher at year-end, amounting to \$264,346 on December 31, last, compared with \$245,346 on the comparable date of 1938.

At the annual meeting held April 16th in Bellingham the following company nominees for directorships were reelected: Ossian Anderson, Robert H. Evans, William C. Keyes, Ralph H. Miller, H. M. Robbins, J. L. Rucker and Fred G. Stevenot. The directors reelected the officers, Ossian Anderson, president; Harry M. Robbins, vice president; Law-

## Balance Sheet Comparison

Independently audited consolidated balance sheet of Puget Sound Pulp & Timber Co. and subsidiary as of December 31, 1939, compares as follows:

	1939	1938	1937
<b>ASSETS</b>			
Cash	\$ 53,785	\$ 200,944	\$ 56,596
Receivables, less reserve	396,837	90,508	193,477
Inventories	264,987	245,346	392,668
Total current assets	\$ 715,609	\$ 537,798	\$ 642,741
Prop., plant & equip. (net)	4,712,233	4,872,250	*4,841,197
Construction cash in banks			1,434,936
Deferred items	173,624	204,938	198,624
Other miscellaneous assets	40,099	48,656	28,356
Total assets	\$5,641,565	\$5,663,642	\$7,145,854
<b>LIABILITIES</b>			
Accounts payable	\$ 193,242	\$ 181,859	\$ 156,356
Dividends payable		37,068	12
Acc'd int, taxes and wages	102,713	46,431	94,199
Contracts payable	16,725	9,375	3,000
Notes payable	133,376	185,000	39,226
Total current liabilities	\$ 446,056	\$ 459,733	\$ 292,793
Construction accts. payable			1,397,039
Long-term contracts payable	11,333	19,715	23,000
Pfd stock (\$20 par)	2,472,740	2,472,740	2,472,740
‡Common stock	2,525,180	2,525,180	2,525,180
Capital surplus	277,631	277,631	425,995
Deficit	91,375	91,357	†9,108
Total liabilities	\$5,641,565	\$5,663,642	\$7,145,854

\*Includes \$2,279,708 construction work in progress. †Represented by 251,836 shares. ‡Surplus.

## Bellis Succeeds Heilbronn As Head of Philippine Paper House

● Amos G. Bellis has been elected president of the J. P. Heilbronn Company, dealers in paper and printer's supplies of Manila, Philippine Islands. Mr. Bellis succeeds the late Joseph P. Heilbronn who died early in January.

Mr. Bellis, whose association with Mr. Heilbronn began with the inception of the business on July 1, 1909, announced that the founder's policies will be followed in the conduct of the business under the new officers. J. R. Carmichael, secretary and assistant manager under Mr. Heilbronn's management continues in those offices and assumes in addition the duties of vice president. Mrs. Joseph P. Heilbronn, as sole executrix of her late husband's estate, remains a member of the board of directors.

son P. Turcotte, secretary and treasurer.

Independently audited consolidated income account of Puget Sound Pulp & Timber Co. and subsidiary for the year ended December 31, 1939, compares as follows:

	1939	1938	1937
Sales	\$3,027,501	\$1,765,720	\$3,042,819
Cost of sales and exp.	2,703,327	1,609,819	2,493,511
Operating income	\$ 324,174	\$ 155,901	\$ 625,646
Other income	28,691	19,195	28,647
Total income	\$ 352,865	\$ 175,096	\$ 654,293
Depn, depl & amortiz.	*229,309	*185,862	237,321
Int., debt. disc. and exp.	10,982	6,769	10,890
Miscellaneous charges	462		2,875
Profit on disposal of capital assets	4,171	†	†69,519
Inc. tax and surtax	17,688		56,350
Net profit	\$ 98,595	‡\$ 17,535	\$ 254,998

\*Depreciation only. †Loss on property sold of \$76,925 charged against earned surplus for the year ended December 31, 1939. ‡Loss.

## Puget Sound Shows Good Profit for Quarter

● For the first quarter of 1940 the Puget Sound Pulp & Timber Company with mills at Bellingham and Anacortes, Washington, reports a net profit of \$266,286 after all charges including depreciation, depletion, amortization and taxes. This is equal, after dividend requirements on the preferred stock, to 91 cents a share on 251,836 shares of common outstanding.

In the first quarter of 1939 Puget Sound reported a net profit of \$12,615 after all charges, equal to around 10 cents a share on the 123,637 shares of preferred.

## International Made Money in 1939

● The International Paper & Power Company and its subsidiaries report a consolidated net profit for 1939 of \$4,893,590, after taxes and charges, including dividends paid on stocks of subsidiaries and accrued dividends not being currently paid on preferred stocks of a subsidiary.

Earnings are exclusive of \$176,375 profit on bonds redeemed during the year. Net profits of International in 1938 totaled \$124,075 which was credited to earned surplus account.

## Shelton Appreciates Power Rate Reduction

● At its meeting March 26th the city council of Shelton, Washington, passed a resolution expressing appreciation for the 25 per cent electric power rate reduction made possible by the installation of additional modern steam generating equipment in the jointly owned steam and electric power plant of Rayonier Incorporated and the Simpson Logging Company.

## Canadian Industry Still Below Peak

● Industrial utilization of Canadian forests has by no means reached its peak, Arthur A. Schmon, president and general manager of Ontario Paper Company, told the annual meeting of the Canadian Society of Forestry Engineers in Montreal.

Chemists are continually finding new uses for Canadian woods, said Mr. Schmon.

"The peak of forest utilization will be found in the future and not in the past," Mr. Schmon said. "The great era of forest products manufacture, and necessarily of forest management, is only beginning.

"In a world of wood substitutes, the pulp log rolls onward and upward to new levels of ingenious application. Cellulose chemistry continues to uncover new derivatives and new employments.

"What does this mean in terms of Canada's welfare? It means not alone sustained employment, but it promises a range of new types of forest industry calling for new skills and the raising of the volume of wage distribution. Nothing can hold back Canada from an ever-increasing profit from the harvests of her woodlands."

## Careful Management Needed

● Though stating that the Dominion's wood supply is almost inexhaustible, he insisted there must be careful management and ample provision for regeneration, so that forest areas will continue to bear profitable yields. Public education to the need is imperative so as to overcome the general apathy to the fate of forests.

"There are those who have been frightened by prophecies of a timber famine," he said. "There is no valid reason why the normal supply of forest products cannot be maintained. We all know the forest area of Canada, with its favorable soil and climatic conditions for natural reproduction is so favorable that overcutting alone never will totally destroy Canadian forests as such.

"The natural regeneration is so prolific that on the 1,000,000 square miles of land suitable only for the growing of trees there is no reason why our forest supply and resources cannot be maintained and we must therefore, educate the people along these lines."

## Newsprint Only One Product

● As a by-product of the forests, the pulp and paper industry had expanded from a production of some 350,000 tons in 1913 to about 4,000,000 tons in 1939, Mr. Schmon said.

"And even then the world demand for pulp products other than newsprint advanced more rapidly, so much so that newsprint today is less than 30 per cent of the total products of the pulp log. Now the striking feature of most newsprint mills is that unlike the itinerant sawmill of the old days they cannot pursue the retreating forest.

"The wood supply must stay put within a fixed transportation distance of the jack-ladder. That one relentless necessity is the best of all incentives to make 'sustained yield' the fixed objective of logging camp and of the board room as well."

## Expect Good Attendance At Del Monte Conference

● According to E. A. Breyman, chairman of the 1940 Pacific Coast Paper Trade Conference, early reservations indicate a good attendance at the Del Monte meeting, May 9, 10 and 11th.

On the schedule will be a discussion of new program of the National Paper Trade Association dealing with the certification of certain wrapping paper merchandise.

G. J. Ticoulat, chairman of the golf tournament committee, has announced the details of the competition. The tournament will be on a handicap basis, thirty-six hole medal play for gentlemen and eighteen-hole medal play for ladies.

The men will play the first 18 holes on Friday, May 10th, and the second 18 holes on Saturday morning, May 11th. The ladies tournament will be held on Friday. Prizes will be awarded for low gross and best net in all classes. There will also be blind bogey prizes, as well as a gentlemen's approach and putting contest, ladies' putting contest, and a mixed two-ball foursome.

Entries are to be sent to G. J. Ticoulat, 343 Sansome St., San Francisco.

## Bag Dealers Worry About Inroads of Paper

● At the convention in Chicago of the National Burlap Bag Dealers Association in January, there was much talk of the progress being made by paper bags in displacing new and used burlap bags.

Said Robert Harris, president of the Iroquois Bag Company of Buffalo, New York, "Buyers are gradually turning to other containers. With the advance of new burlap, they started to use paper bags, and if new burlap should go too high, the new bag manufacturers will feel the effects as well as we, and once we have lost business to paper bags, I fear it will never return."

W. J. Woolford, president of the Woolford Bag Company of Baltimore, said in part, "Paper Bags are being used more extensively than at any other time with the possibility that the surface has not been scratched. Just a few days ago it was learned within the trade that three large flour mills are using 140-pound paper bags. The use of multi-wall bags is one danger on which the used bag industry can no longer turn its back.

"With the present high prices of burlap, a great many buyers of new and used burlaps find it more advantageous to use new cotton bags; and in a great many instances, these are cheaper than used burlap bags. It is well known by now that when a purchaser changes to paper bags or new cotton bags, it is very unlikely he will return to burlap bags."

Mr. Woolford had one remedy to suggest. "Buying prices," he said, "must be brought to a level where used bags will be attractive to the trade. Keep our buying price down so that the proper differential can be maintained between it and the selling price, and still be attractive to the consumer. Dealers must have a greater margin today due to additional taxes, increased payrolls, etc., but it is necessary to have something to offer the consumer which, mainly, is price."

## Board Production on Fair Level in February

● Production of paper board in mills in the United States amounted to 399,970 short tons in February, according to the monthly summary issued by the Census Bureau, showing a decrease from 430,895 tons produced in the preceding month but a large gain over 338,803 tons in the same month a year ago. Two months' output this year totaled 830,865 tons, as against 662,197 tons in the corresponding period of last year, the report reveals.

Board production was at 70.8 per cent of rated capacity during February, compared with 72.1 per cent in January last and 67.8 per cent in February, 1939. New orders received by manufacturers in February called for a total of 367,897 tons of board, against 398,125 tons in the preceding month and 338,030 tons in the same month last year, while unfilled orders held at mills at the end of February were for 115,266 tons, contrasted with 140,269 tons a month before and 112,801 tons a year previously.

Board mills consumed 265,066 tons of waste paper in February, compared with 280,033 tons in January this year and 247,710 tons in February last year. Consumption in the first two months of the current year totaled 545,099 tons, against 481,021 tons in the same time a year ago. Waste paper consumption was at 67.5 per cent of mills' rated capacity in February, as against 68.7 per cent in January last, and 69.1 per cent in February, 1939.

Stocks of waste paper at board mills at the end of February totaled 241,242 tons, contrasted with 237,490 tons at the close of January last and 262,344 tons at the end of February a year ago.

## Oregon City Told Of Hawley Contributions

● Officials of the Hawley Pulp & Paper Company attended the April 9th luncheon meeting of the Oregon City Chamber of Commerce in a group, and Vernon L. Tipka, research engineer for the company gave the principal talk.

Mr. Tipka, who was introduced by Carl E. Braun, vice president and mill manager, explained several charts which graphically portrayed the Hawley safety program that has resulted in the reduction of accidents; the taxes paid by the mill; the increased production to 280 tons per day with an annual payroll of around a \$1,000,000.

Although newsprint represents the greater proportion of the Hawley production, Mr. Tipka pointed out that the company's policy is not only to find new grades of paper suitable for production but also to perfect the quality of those already part of the mill's output.

He said that the success of the Hawley Pulp & Paper Company was largely due to the fine spirit of cooperation which exists within the mill and extends to its relations with the community and also to the people who buy the paper.

## Paul May Visit Northwest Dealers

● Late in March Paul May, president of the Pomona Paper Products Company of Pomona, California, makers of tissue products, made his first business trip into Oregon and Washington.

Mr. May called on a number of dealers and reported business as being good.



## Port Townsend Men Receive Awards

● Employees of the National Paper Products Company, Division of Crown Zellerbach Corporation, who have completed five and ten years of service, received pins, others who have offered suggestions for the good of the mill received special awards, and members of the Nappco basketball team were honored at the monthly meeting of the Nappco Pivot Club March 26th.

E. W. Erickson, resident manager, explained the service pin award system and awarded 10-year pins to Harold Bogan, William Coffel, W. B. Cornett, John Dooley, James Marlow, James McKee, J. A. Olsen, P. S. Simcoe and W. C. Smith.

Five-year pins went to Robert Bardue, Steve Coney, Harold Kuehn and Harold Peterson.

Suggestion awards were given seven employees. Suggestions for improving production and working conditions at the mill are turned in and each six months a committee chooses the seven best. They were tendered by J. A. Campbell, first; Ole Tjensland, second; J. A. Campbell, third; L. G. Barrett, fourth; Leonard Balch, fifth; George Bertak, sixth; and F. J. Simcoe, seventh.

The Nappco basketball squad, which won the city league championship for the second straight year, attended the meeting as special guests. Coach Felix B. McLarney presented the championship trophy to Manager Erickson. Team men present included Jack Younce, Clarence Hower, Harry Pollard, Al Black, Morton Barros, Pete Mercereau, LeRoy Porter, Art Hower, Sam Peach, Don LaVera, Hal Bogan, Lyman Camfield, all players; and Nels Kjellin, Eddie Moor and Wendell Redding of the managerial staff.

## Project Program to Salvage Woods Waste

● The Port Angeles, Washington Evening News commented editorially early in April on the possibility of salvaging large quantities of waste wood left after logging operations. We quote the News:

"After their ship has unloaded a cargo of lumber in an Oriental port, American seamen are accustomed to seeing Oriental women swarm overside from their sampans (uninvited) and gather up every available chip or splinter of wood.

"In France, women gather up fallen twigs in the woods, carrying bundles of them home for fuel.

"In the Pacific Northwest, foresters say we leave as much waste wood on the ground to rot as eastern states harvest altogether from an equal area.

"A constructive move towards utilizing more of this waste was mentioned by Thomas T. Aldwell at a Port Angeles Chamber of Commerce meeting Friday. The chamber's forestry committee, he said, is endeavoring to arrange a market for hemlock cordwood so that good wood left in the woods after logging operations can be salvaged by pulpwood cutters working individually.

"District Ranger Floe told the forestry committee that the U. S. Forest Service will sell such timber in the woods at 25 cents per cord to pulpwood cutters. The forest service is anxious to develop this activity as a conservationist measure on government lands, and of course the same possibilities and advantages exist on private or state lands recently logged.

This would utilize good wood which it does not pay loggers to remove.

"If local pulp mills find it practicable to resume buying hemlock cordwood in limited quantities, sufficient to cover salvage operations, it will aid the community in providing some employment for individual wood cutters, and it will aid maximum reforestation for future use—a matter of direct interest to the industry.

"Pulp mills already are a major factor in avoiding timber wastage through purchase of the hemlock which used to be left in the woods by Douglas fir logging operators due to lack of market value sufficient to pay to haul it out.

"Pulp mill consumption of hog fuel has likewise greatly reduced wood waste by utilizing waste from sawmill operations.

"Proposed salvaging of hemlock waste, remaining on the ground or in the corners of sections after logging, recalls another similar salvage operation long exercised on cedar.

"Many wood cutters are making an independent living by salvaging cedar left on logged-off lands in Clallam county, and selling the wood to M. J. Schmidt's unique cedar shake mill or to small shingle mills. Timber land owners have been surprised at the value thus realized from waste wood left on lands which they had clear cut.

"Likewise Douglas fir left after logging operations is readily disposed of to wood cutters for stove wood, or for plywood logs which are of comparatively short length. Disappearance of old growth timber in the vicinity of Port Angeles has made such salvage important to the stove wood supply."

## Calder Optimistic Over Pulp Prices

● Alexander Calder, president of the Union Bag & Paper Corporation, was quoted in press reports of April 9th as saying,

"I wouldn't be surprised to see prices go to \$75 within a few months." It is assumed Mr. Calder meant the price of unbleached kraft pulp. He commented that during the past war with the Scandinavian countries remaining neutral prices still rose 300 to 400 per cent.

Mr. Calder was also quoted as having said to Union Bag stockholders that he believed there would be a greater shortage of paper pulp in the next year than there was during the World War I. On the eve of Germany's invasion of Denmark and Norway Mr. Calder said the price on one order of 15,000 tons of pulp had jumped from \$32 to \$55 per ton.

## Soundview Pays Notes In Advance

● The Soundview Pulp Company has been liquidating its note debt as rapidly as possible. The latter part of March the company paid off notes aggregating \$130,000 due January 16, 1942, leaving a balance due of \$910,000 payable \$130,000 on January 16, 1943, and \$780,000 payable January 16, 1944.

Last year the company liquidated \$260,000 in notes in advance of due date. One note maturing January 16, 1940, for \$130,000 was paid early in 1939 and a second note, maturing January 16, 1941, for a similar amount, was paid toward the close of 1939.

## Ken Howe Named Northwest Manager for Westinghouse

● Kendall L. Howe, better known to the men in the Pacific Northwest pulp and paper industry as 'Ken,' was appointed manager in charge of sales for the Westinghouse Electric and Manufacturing Company's Seattle, Spokane and Tacoma offices on March 7th. Mr. Howe succeeds the late Buell Blake in this key position.

His appointment was made by Charles A. Dostal, Pacific Coast district manager in San Francisco. Mr. Howe has been a resident of Washington for many years. He attended the University of Washington after graduation from the Centralia high school. Obtaining his degree as bachelor of science in engineering from the University in 1923 he joined the Westinghouse organization in 1924 as a 50 cents an hour craftsman. After an extensive course of training at the Westinghouse headquarters in East Pittsburgh, Pa., he was transferred to Seattle.

As a member of the industrial department Mr. Howe took part in designing and installing a large amount of the electrical equipment sold by Westinghouse to the Pacific Northwest paper mills. Last summer he was transferred to the company's Pacific Coast headquarters in San Francisco and it is from that city he is returning to his old home in Seattle.

## Charles Belvin On Southern Trip

● Charles Belvin, Pacific Coast representative for the Chromium Corporation of America, left Portland March 9th on an extended business trip into the south and southeast.

Mr. Belvin went by train to Chicago and then drove into the South visiting the pulp, paper and textile mills in the interests of the Chromium Corporation. He expected to be away from Portland six weeks.

## Great Northern Maintains \$49 Newsprint Price

● The Great Northern Paper Company of Maine announced April 1st that it would maintain its \$49 per ton price for newsprint during the second quarter of 1940. Last fall the company announced that its price would be \$49 for the first three months and \$50 for the second quarter.

No statement was issued concerning the price for the second six months of the year.

## Rayonier Redeems Scrip Certificates

● The stockholders of Rayonier Incorporated have recently been notified of the redemption of bearer scrip certificates, and advised that, in accordance with provisions of the company's certificate of incorporation, a total of 83 unexchanged shares of \$2 cumulative preferred stock was sold at \$28.36 a share and 251 shares of common were sold at \$18.75 a share. Proceeds have been impounded to be used for redemption of series certificates upon surrender or cancellation. The certificates were received by stockholders of Rainier Pulp & Paper Company, Olympic Forest Products Company and Grays Harbor Pulp & Paper Company in lieu of fractional shares on consolidation of the companies into Rayonier Incorporated.

## Sidney Roofing Rebuilds Plant Lost by Fire

● Last August the Sidney Roofing & Paper Company at Sidney near Victoria, B. C., lost its groundwood pulp mill by fire. In rebuilding the plant the company planned for further expansion.

Completion of the first step in the company's program of expansion and modernization was marked on March 13th by an appropriate ceremony with Mayor Andrew McGavin of Victoria pressing the button which started the 500 horsepower grinder motor.

"It is a great pleasure for me to officiate at the opening of this new building," Mayor McGavin said. "The extension of this plant means putting more men to work and I can tell you that even ten or a dozen men added to the payrolls means quite a bit to the city."

"I congratulate you on your enterprise in going ahead with this expansion. In pressing this button that starts the motor I express the hope it will not stop for a long, long time."

Present at the starting of the groundwood plant besides Mayor McGavin, was E. G. Rowebottom, deputy minister of trade and industry for British Columbia, several directors of the company, Frank J. Barker of Calgary, one of the company's principal distributors on the prairies, and B. P. Schwengers, Vancouver Island distributor. R. Logan Mayhew, assistant manager, introduced the mayor, and afterward with R. W. Mayhew, general manager, he conducted the guests through the plant.

The new groundwood unit consists of a single grinder turning out 10 tons per day, but provision has been made for the later installation of three more. The groundwood mill is housed in a building 100x60 feet sheathed with "Fibrock," a fireproof building board manufactured by the company in its Vancouver plant.

A new warehouse 175x50 feet of concrete and steel construction was also constructed since the fire of last year. A new 200 horsepower boiler is being installed and the company expects to modernize further its paper machine during the present year.

The Sidney Roofing & Paper Company produces 30 tons per day of boxboard, test board, felts, building paper and roofings. The plant is equipped with 1 four pocket grinder, 1 wet machine, 5 beaters, 3 jordans and 2 cylinder machines, 42 and 82 inches in width.

The Vancouver plant is known as Fibrock Insulation, Limited. It manufactures building board and combined sheathing and stucco lath.

Officers of the company are: J. W. Spencer, president; A. D. MacFarlane, secretary; R. W. Mayhew, general manager; R. Logan Mayhew, assistant general manager; Mitchell Thom, superintendent; and F. Cartet, chief engineer.

## St. Regis Reports Profit for 1939

● The St. Regis Paper Company and subsidiaries report for 1939 a net profit of \$547,820, equal after annual preferred dividend requirements to 5.7 cents per share on the 4,120,714 common shares. Earnings contrasted with a deficit of \$196,018 for 1938.

St. Regis had net sales for 1939 of \$15,359,478 compared with \$12,722,897 for 1938, a gain of 20.7 per cent.

## Superintendents To Meet In Cincinnati

● The 21st annual meeting of the American Pulp & Paper Mill Superintendents Association will be held at the Netherland Plaza Hotel in Cincinnati, Ohio, June 18th to 20th inclusive.

A portion of the program of papers has been released. The group meeting on board will hear talks on "Bacteria in Board and Government Requirements Relative to Same," and on the effect of proper humidity on the printing and scoring of board. The group meeting on coating will hear a paper on "Carbonate in Coated Paper," and the following additional papers have been tentatively listed, "Facts About Coating," "Coating Material," and "Effect of Clay in Coating."

Under finishing, storing and shipping three papers are listed: "Air Conditioning of Finishing Room from a Practical Angle," "Paper Sorting Machine," and "Handling of Paper Broke."

The newsprint and wrapping group may find a paper on the new newsprint mill at Lufkin, Texas, on the program.

## George Holt Joins Superintendents Association

● George A. Holt of Rayonier Incorporated, Grays Harbor Division, Hoquiam, Washington, recently became a member of the American Pulp & Paper Mill Superintendents Association.

## Vancouver, Washington, Using Waste Liquor to Lay Dust

● The city of Vancouver, Washington, is again this year enjoying dust-free streets through the liberal use of sulphite waste liquor supplied without cost by the Columbia River Paper Mills.



LOUIS BLOCH, Chairman of the Board of Crown Zellerbach Corporation, congratulating O. W. DEXTER (at the right), head of the corporation's purchasing department, during a surprise party at San Francisco on March 22nd honoring Mr. Dexter's 25 years of service with Crown Zellerbach Corporation and predecessor companies.

## Oakley Dexter Given Surprise Party

● On Good Friday afternoon, March 22, executives and more than 250 employees of Crown Zellerbach Corporation headquarters in San Francisco, attended a surprise party honoring the 25th year of O. W. Dexter's service with the corporation and predecessor companies. Mr. Dexter is head of the Crown Zellerbach Corporation's purchasing department.

A native San Franciscan, Mr. Dexter joined Crown Willamette Paper Company in San Francisco on March 22, 1915, when but 15 years of age as office boy for president William Pierce Johnson and vice-president Louis Bloch. One of his principal duties was to drive executives about town with a white horse and surrey, and to handle company mail between the office and the Ferry post office terminal. Mr. Dexter recalls that many nights it was long after six o'clock when he finally stabled the horse near the present Ferry building before going home.

First experience in his present line came at Floriston, California. From Floriston he returned to San Francisco to do accounting work for the Tulare Mining Company, then a subsidiary of Crown Willamette. Later he entered the Crown Willamette purchasing department under D. J. Goldsmith, became San Francisco manager of the Pacific Coast Supply Company when only 21 years of age, and subsequently purchasing agent for the Crown Willamette Paper Company.

In 1932 Mr. Dexter became head of the Crown Zellerbach Corporation's purchasing department and continues serving in this capacity.

### Finnish Mill Loss Still An Estimate

● The Forest Products Division, Bureau of Foreign & Domestic Commerce, U. S. Department of Commerce, reported on April 9th that it estimated 12 pulp and/or paper mills, including 5 chemical pulp mills, are located in the area unofficially reported to have been ceded to the Soviet Union by Finland under the terms of the recent Soviet-Finnish peace agreement.

The report stated, "Since the new boundary lines necessitated by the agreement have not yet been officially defined, the estimate of the number of mills may have to be slightly revised when the extent of the area ceded is accurately known."

Should the territory adjacent to and including the city of Enso be included in the ceded area, which city is reported as now being lost by Finland, the Soviet Union would acquire a portion of the Finnish pulp industry with a capacity for producing annually 176,000 short tons of chemical pulp, evenly divided between sulphite and sulphate wood pulp.

The inclusion of the city of Enso in the ceded territory in addition to other cities believed taken would result in a loss to Finland of 4 sulphite pulp mills with an approximate annual capacity of 270,000 tons and 5 mechanical pulp mills, one of which also manufactures sulphite pulp, with an approximate annual capacity of 25,400 tons.

In addition, says the Department of Commerce report, it is believed that 5.9 per cent of newsprint production and 23.7 per cent of the paperboard production was lost to Finland under terms of the peace agreement.

### Newsprint Cost Rising In England

● Early in April it was reported from London that the price of newsprint was increased on April 6th to 21 pounds 10 shillings. At the official pound-dollar exchange rate that would be equivalent to \$86.42 per ton. On the basis of the "free" pound rate of \$3.52 the cost in dollars would be \$74.67 per ton. While the news dispatch did not so state the price quoted is undoubtedly for a long ton of 2,240 pounds.

The rise in the cost of newsprint in England since the war began is reported to have been 10 pounds 5 shillings or \$41.20 per ton increase on the official value of the pound at \$4.02. On the "free" pound basis the increase would be \$36.08 per ton.

### Canadian Pulp Exports Declined in February

● During February Canada exported 66,355 short tons of wood pulp of all grades and valued at \$3,398,752, according to the Dominion Bureau of Statistics. The February exports compared with 93,488 short tons of all grades in January valued at \$4,320,939; and, with 36,446 short tons worth \$1,781,886 in February, 1939.

Although the February exports were down about 30 per cent below January's they were 80 per cent higher than the exports in February a year ago.

Only 3,036 short tons valued at \$188,725 were exported to the United Kingdom in January against 9,103 short tons worth \$357,485 in January.

Canada's February exports included

31,690 short tons of bleached sulphite valued at \$1,928,155; 12,898 tons of unbleached sulphite valued at \$550,998; 9,818 tons of sulphate valued at \$587,417, and 10,296 tons of groundwood pulp worth \$260,884.

Canadian February exports to the United States totaled 58,128 tons valued at \$2,873,610 as compared with 74,588 tons worth \$3,416,083 in January of this year.

### CZ Headquarters Staff Holds Quarterly Dinner

● Jobs and business are won or lost through personality traits and attitudes, Samuel S. Worswick, San Francisco sales counsellor and author of "Romance of Selling" told 125 men from Crown Zellerbach headquarters at the quarterly dinner at Aquatic Park Casino, San Francisco, on Monday evening, March 11th.

"A recent survey taken on 4000 unemployed men revealed that 90 per cent had lost their positions on account of personality traits and only ten per cent because they lacked a specific skill," said Mr. Worswick.

"South Africa has one of the largest orange groves in the world, one firm packing in excess of two million cases annually," George Runyan, of the sales department, told the meeting. Mr. Runyan is recently back from two years spent in South Africa.

"Elephants and baboons are the greatest menaces to the orange crops of South Africa," he said. "Hundreds of baboons enter the groves to eat the oranges, and droves of elephants uproot many of the trees. The baboons seem unafraid of women but retreat from even the smallest male child."

Executive Vice President R. A. McDonald of Crown Zellerbach Corporation presented a 25-year service pin to Ray Dickey, and a 10-year service pin to Millard K. Rawlings, both of the sales department.

Secretary D. J. Goldsmith presented a 25-year service pin to Oakley Dexter, purchasing agent of Crown Zellerbach Corporation.

Roy O. Young, assistant vice president, presented a 15-year service pin to Elmer Hughes, order department.

I. Zellerbach and M. M. Baruh were honor guests at the dinner.

### Business Research Organization Formed

● Plans for the organization of a foundation to do research work in the interests of private business enterprise have been announced by George S. May, Chicago business man.

The organization, to be known as the George S. May Business Foundation, has been granted a non-profit Illinois charter and will open offices at once in Chicago and New York. Research engineers will be maintained in eighteen leading American cities.

The foundation, the announcement said, will be supported entirely by contributions from members of its board of trustees and its findings will be made available to business groups and educational institutions without charge. Subjects slated for early study include: bonus payment plans for supervisors and executives; modern methods of market analysis; the effect of public opinion on business; and the value of trade associations to business.

### Japan Affected by War in Scandinavia

● The spread of war to Scandinavia may shut off Japan's sources of rayon pulp in Norway, Sweden and Finland for an indefinite period, and under such conditions Japan would be wholly dependent upon the United States and Canada for import requirements.

A total of 65,000 metric tons, or 52.6 per cent of Japan's imports of rayon pulp from outside the yen bloc during 1939, was bought from Norway, Sweden and Finland.

The only other suppliers, except Manchukuo, were the United States which supplied 44,500 metric tons, or 39.7 per cent of Japan's total non-yen bloc pulp imports, and Canada from which 8,500 tons or 7.6 per cent were bought.

The current value of Japan's pulp imports from Scandinavia which may be sought from American and Canadian sources, is between 20,000,000 and 25,000,000 yen delivered in Japan (between \$4,690,000 and \$5,863,000 at current exchange rates).

An official of the Japanese Ministry of Commerce and Industry stated that the quality of the pulp which Japan has been importing from Norway, Sweden and Finland is about the same as the rayon pulp being imported from the United States.

Japan also is expected to be in the market for 15,000,000 yen yearly worth of machinery which is now bought from Sweden and for 24,000,000 yen worth of ores and metals, chiefly Swedish special steels and special iron goods such as wire rods and iron ribbons, Norwegian aluminum and nickel and Danish kryo-lite.

### St. Helens Building Warehouse, Remodeling Office

● On the first of the month work began on a large new warehouse building for the St. Helens Pulp & Paper Company at St. Helens, Oregon. At the same time the office building is being remodelled to provide better facilities.

The new warehouse is 115 by 273 feet, one story high and of reinforced concrete.

### Sven Storgaards Writes From Finland

● A number of men in the Coast pulp industry will recall Sven J. Storgaards who visited a number of mills last summer on a Finnish scholarship. Several have received letters from him recently including Nels O. Galteland of the St. Regis Kraft Company, Tacoma.

In that letter Mr. Storgaards said that he had reached Finland just two weeks before Russia began her invasion, and after his ship was delayed 18 days at Krikwall by the British contraband control. He was appointed chief chemist of the Karihaara sulphite and sulphate pulp mills of A. B. Kemi, O/Y upon his return, but had no opportunity to assume his duties before being called to serve first in the Finnish chemical warfare section and then in the anti-aircraft defense. In his letter Mr. Storgaards said that up to February 12th the Finns had shot down 324 Russian planes, several of American manufacture.



## Dowicide Treatment Stops Bacterial Destruction of Felts

● Costly bacterial destruction of felts used in manufacturing paper has been eliminated at negligible cost through the use of Dowicide G, according to the Dowicide division of The Dow Chemical Company, Midland, Mich., reporting the results of experimentation carried on by Dr. John Weidner, at the Hoberg Paper Mills, Green Bay, Wis.

Early last year, Weidner reports, decreased felt life due to bacterial action became apparent in holes in wet felts and cracks and holes in pick-up felts. Felts which lasted an average of 600 hours were giving out at 190 to 500 hours and wet felt dropped from 160 hours service to as low as 80 to 100 hours.

Through the use of Dowicide G, wet felt life was increased from 10 to 15 per cent and as much as 45 to 60 per cent, it is reported, with top felt or pick-up felt increasing in life 20 to 100 per cent.

On a 132-inch machine, two to four pounds of Dowicide G was used for one felt and two to four pounds for two felts, both mixed with 50 gallons of water. During the weekly clean-up the solution was thrown onto the felts on the altering side of the press after the wash-up was completed and just as the felt section was turned over for the last time. In all cases where there was visible evidence of bacterial action, this treatment absolutely prevented any trace of destruction, the report declares.

Data for the felt life comparisons was taken during a no-treatment period from January through April, and a treatment period of May through November, when bacterial activity is greatest. When treatments were discontinued in November and December, bacterial activity again became apparent.

From the experiments in the Hoberg mill Dr. Weidner drew the following conclusions:

1. A simple and effective method for preventing felt destruction has been tried under mill operating conditions.

2. The treatment is easily applicable to all machines, the amount depending on the size of the machine.

3. Actual amounts used on felts for a machine having a 132-inch wire was two pounds for one felt and two to four pounds for two felts.

4. Dowicide G was found to be the most effective of the agents tried.

5. Actual running life was increased for individual felts.

6. Average life was increased also by eliminating short life felts due to bacterial destruction.

7. Wet felt life was increased from 10 to 15 per cent and as much as 45 to 60 per cent.

8. Top or pick-up felt life was increased from 30 to 100 per cent.

9. These increases were obtained during the months of May through November as compared to felt life from January through April.

10. At no time during treatment was a felt lost by bacterial destruction.

11. Whenever there was visible evidence of bacterial action, this treatment absolutely stopped the destruction.

12. After treatments were discontinued bacterial activity in the felts was again apparent.

## Use of Vat Dyes In Printing Inks and Paper

● Vat dyes, the fastest known to science, afford a solution to problems now facing the printing ink trades, Crayton K. Black, DuPont Company chemist, told the American Chemical Society's spring meeting in Cincinnati, on April 10. Tests which established a resistance to fading not available in any other pigment were reported, indicating wide possibilities particularly on outdoor posters.

The same characteristics of the dyes so valuable in the textile field, carry over into the study of pigments, Dr. Black said. Identical problems, such as fastness to light even in pale tints, fastness to acid and alkali and fastness to bleed in oil, alcohol and water, are met in both industries.

"In printing inks, pale tints for outdoor poster work have always been difficult for the pigment and ink chemist," Dr. Black said. "Many pigments which are so durable in heavy shades fade rapidly when used in tints such as a flesh shade. Toluindigo toner is an example of this type. The use of vat dyes assists in solving at least some of these problems."

"Pigments fast to alkali for use in soap wrappers have been hard to find over a complete shade range. Vat dyes are fast to alkali and can be used where there is a definite need, especially for reds meeting this requirement."

Dr. Black displayed an exhibit showing a Fade-O-Meter exposure of a phosphotungstate of rhodamine and a thioindigo pink put on as a printing ink. While admitting that the Fade-O-Meter test was "not necessarily a true measure of outdoor durability," the speaker pointed to the obvious advantage of the vat color as carried over into practical trial.

At the present time, he said, the number of colors which can be used in tints for outdoor posters is extremely limited. The same problem of light fastness of tint is encountered in the sign enamel trade.

"In paper beater dyeing, also, small amounts of extremely light-fast, red-shade blues are required to tint high grade whites. They must be so finely divided that no specking occurs. Vat blues and violets in highly dispersed form can be used to advantage. They are extremely light-fast even in the small amounts used, and can be produced sufficiently fine to prevent specking."

"Despite a relatively high pigment cost," Dr. Black concluded, "vat dyes may fit into certain gaps in our present line of pigments. Particularly in the case of pale tints where only a small quantity of vat color is required, we may have an economical solution to a problem."

## Whitemans Return From Trip to Orient

● Mr. R. R. Whiteman, manager of the coarse paper department of Blake, Moffitt & Towne at Los Angeles, returned March 30 from an extended trip to the Orient. Mrs. Whiteman accompanied him. The trip celebrated his 25 years' service with his company. Japan was the scene of most of their travels. They visited Yokohama, Tokyo, Kyoto, Kobe and Osaka.

## McGillivray Powell River Groundwood Super

● W. McGillivray has been appointed groundwood superintendent for the Powell River Company, Powell River, B. C., succeeding Ernest P. Ketchum who recently retired after 28 years service with the company.

Mr. McGillivray joined the Powell River organization in 1919 after serving in the Royal Air Force in World War I. In 1926 he became head millwright and in 1929 was appointed assistant groundwood superintendent.

## Jim Brinkley Heads Entertainment Committee

● G. S. Brazeau, general chairman for the Fall Meeting of National TAPPI which is to be held in Seattle August 20-23rd inclusive, recently announced the appointment of James Brinkley as chairman of the entertainment committee.

Mr. Brinkley is well known in the pulp and paper industry and is president of the James Brinkley Company of Seattle, power transmission and materials handling engineers. The company also represents the Pulp Bleaching Company and the Nash Engineering Company in the Pacific Northwest.

## Walter Smith Establishes Flat Screen Service

● Walter G. E. Smith of Portland, Oregon, has recently established advisory service for pulp and paper mills desirous of improving the operation and production of their flat screens.

For more than two and a half years Mr. Smith has devoted his time to an exhaustive study of flat screen design and operation. Out of his work have come two devices which are now operating in several Pacific Coast mills, the automatic siphon spout and the pulsator.

The knowledge and experience gained during this period of study Mr. Smith is now offering to the industry.

## Cameron Machine Appoints New Chief Engineer

● The Cameron Machine Company recently announced the appointment of William M. Stocker as chief engineer. Mr. Stocker succeeds R. McC. Johnstone, who resigned several months ago.

He first joined the Cameron Machine Company of Brooklyn as service manager in 1925. Later he became assistant chief engineer and was in large part responsible for many of the design features now incorporated in Cameron winders, rewinders and slitters. Mr. Stocker is a mechanical engineering graduate from the Royal Technical Institute of Manchester, England. His experience in engineering designs includes textile machinery, tank design in the Ordnance Department of the Army, high speed gearing for the navy's dirigibles, and for three years prior to joining Cameron he was chief engineer of F. X. Hooper Co., manufacturers of printers, slotters and scorers.

The Cameron Machine Company's plant in Brooklyn is working at capacity and orders on hand indicate full operations for some months to come.

# Trade Talk



of Those Who Sell Paper in the Western States

## Crikelair to Represent L. L. Brown Paper Company

● David J. Crikelair is now western representative for the L. L. Brown Paper Co. of Adams, Mass. Mr. Crikelair was formerly with Zellerbach Paper Co., having been connected with that firm for twenty years, eighteen years in Los Angeles, and the last two years as manager of the Phoenix branch in Phoenix, Ariz. He will cover the eleven western states. The L. L. Brown Paper Co. has not had a western representative for two years, since the late Roy Swain represented them.

Mr. E. E. Keough, sales manager of the company, was in Los Angeles early in April making final arrangements for the new representation. Mr. Crikelair will make his offices at 337 H. W. Hellman Building in Los Angeles. The latter part of March Mr. Crikelair went east to visit eastern mills and visit friends in Kansas City, Chicago, Boston and Detroit.

The L. L. Brown Paper Co. are makers of ledger and bond papers and recently introduced two new papers: Escort and Forward. Escort is a fifty per cent rag paper, first of this type to be made by the company.

## Carter, Rice Handle New A. P. W. Line

● Carter, Rice & Co., San Francisco, has the distribution of the new line of toilet seat covers and dispensers, manufactured by the A. P. W. Paper Co., Albany, N. Y., who are said to be the largest manufacturers of toilet tissue in the world.

## Taylor Assisting Philbrook For Graham Paper

● Assisting Frank Philbrook, well known Pacific Coast representative for the Graham Paper Co. in Los Angeles, is Willard F. J. Taylor. Mr. Taylor comes into the paper business with a family heritage of achievement in paper manufacturing back of him. His grandfather was Charles F. Taylor of the Taylor Atkins Co. of Burnside, Conn., one of the old, leading firms. The elder Mr. Taylor also invented and developed many devices used in paper manufacture.

## Zellerbach Paper Co. Service Pins

● Seventy years of service with the Zellerbach Paper Company, San Francisco, were rewarded last month with the presentation of service pins to Frank Corrigan, 30 years; Wm. E. Burchfield, 20 years, and Florence Campbell, 20 years, all of San Francisco Division.

## BM&T Expand Phoenix Division

● As evidence of the steady and prosperous growth of the city of Phoenix, Arizona, announcement has just been made that Blake, Moffitt & Towne, large pioneer firm of paper merchants, have expanded their Phoenix division.

Recent building activities on the company's property confirmed the rumors that an expansion was contemplated. In response to an inquiry, Mr. L. C. Calkins, in charge of the company's Arizona operations, made this statement:

"Due to the expansion of our business since opening this division 13 years ago, we have found it necessary to make larger and more adequate warehouse facilities. Our new addition is 50x126 feet and is built immediately adjoining our old building. This addition increases our floor space from 11,600 square feet to 21,750 square feet. Adequate space has been given in front for the loading and unloading of trucks which means faster delivery service. This, coupled with an enlarged railroad siding enables us to handle cars efficiently and rapidly. All of these improvements are designed for greater efficiency and quicker service for the paper buyers of Phoenix and vicinity."

The Phoenix division was opened in 1927 at the present address of 101 E. Buchanan Street, and is one of sixteen divisions in a chain covering the five Western States. A division is also maintained at Tucson, Arizona.

The company handles a complete line of papers of all kinds; printing, wrapping, bags, paper products, twines and cordage, and represents, as an exclusive distributor, many of the best known brands manufactured by nationally recognized mills.

## Paterson Parchment Enlarging Warehouse

● Due to a steadily growing business the Paterson Pacific Parchment Co. is building a four-story Class A steel and concrete warehouse building adjoining their offices at 340 Bryant St., San Francisco.

The new building will give the company 84,000 sq. ft. additional warehouse space. No new equipment will be installed, but the building will be used for mill roll storage.

## McGrath Leaves Zellerbach Paper Co.

● Leigh J. McGrath, formerly in the Headquarters Purchasing Department, Zellerbach Paper Company, San Francisco, has resigned to join the Curle Mfg. Co., which makes an accessory to the Linotype.

## Nail to Make Headquarters In San Francisco

● James M. Nail, sales manager of the Oregon Pulp and Paper Co. and related Leadbetter interests, who for the past year has spent a good deal of his time in Portland, is for the time being making his headquarters in San Francisco. Ralph Olson who has been operating in San Francisco, is at present in Portland.

## Murphy and Buist Add Three New Lines

● Gordon Murphy and Norman A. Buist, paper mill representatives with offices in Los Angeles, announced the addition of three new companies to their list of principals. These are the District of Columbia Paper Mills, Inc., of Washington, D. C., the A. M. Collins Manufacturing Co. of Philadelphia, and the Waterfalls Paper Mills of New York. Mr. Murphy and Mr. Buist will leave Los Angeles the 15th of April for an extended trip through the western territory.

## London Leaves Western Paper Converting

● Jack London for a number of years associated with the Western Paper Converting Company in the Los Angeles office resigned his position March 15 and purchased a variety store in Long Beach where he will be in business for himself. Mr. London had been with the Western Paper Converting Company for seven years, and for the last two years in Los Angeles. He was an active member of the Paper Mill Men's Club.

## Mielke Returns From Vacation in Mexico

● Otto W. Mielke of San Francisco, general manager of Blake, Moffitt & Towne, was in Los Angeles early in April, returning home from a vacation trip to Mexico City.

## Pacific Coast Trade Visitors in March

● H. D. Archibald, vice-president of the Keyes Fibre Co., New York office, was a Pacific Coast visitor last month.

● George Olmsted Jr., vice-president of the S. D. Warren Co., from Boston headquarters, was on the Coast last month visiting friends in San Francisco and Los Angeles.

● Tom Donoghue, sales department, Riegel Paper Corporation, New York City, was a Pacific Coast visitor last month.

● George Olmsted Sr., vice-president of the S. D. Warren Co., Chicago office, was vacationing in Southern California last month.

## Maxwell Retires From BM&T

● On March 25, Blake, Moffitt & Towne announced the retirement of William B. Maxwell, from his active duties as secretary and treasurer of the Company, marking the completion of a period of nearly 55 years in the paper business. Mr. Maxwell's retirement was the subject of a formal expression of appreciation by the board of directors for his long and loyal service in a position of trust in the management of the corporation. In making the announcement to the managers of the company's 15 divisions, Mr. James K. Moffitt, president, made this comment:

"Mr. Maxwell entered the employ of the company on July 19, 1885, and has served it with faithfulness and efficiency continuously since that date. For the past 33 years he has been secretary and treasurer of the company. He will retain his directorship and association with the heads of the company. He retires in good health and with the high esteem of his associates and friends."

In addition to the paper business, Mr. Maxwell for many years has taken an interest in civic affairs, and activities connected with the wholesale trade in the Bay Region. He has devoted much time to the work of the Board of Trade of San Francisco, taking an active part in its management. He has served the organization as director since 1916, during which period he held the office of president from 1923-1924, and for the past fourteen years has been its treasurer.

Succeeding Mr. Maxwell as secretary and treasurer of Blake, Moffitt & Towne, the announcement carried the news of the election to that position of Lester L. Liston, who has been with the company for a period of 20 years. Prior to entering the paper business, he was for some time connected with one of the large wholesale stationery concerns in San Francisco. His experience with Blake, Moffitt & Towne began in the Credit Department, following which he was made manager of the Accounting Department. For the past several years he has been serving as assistant secretary and treasurer, so it was natural that he should have been selected for advancement to the position made vacant by the retirement of Mr. W. B. Maxwell.

## Grosjean Transferred To Honolulu

● L. E. Grosjean, boxboard salesman for Fibreboard Products, Inc., San Francisco, for many years, was the guest of honor at a farewell party given by San Francisco box manufacturers and supply men at the Palace Hotel, on Wednesday, February 14. Mr. Grosjean left the following day for Honolulu, where he will represent Fibreboard Products, Inc., replacing Mr. Geo. Martin, who was the company's representative in the islands during the past thirteen years, and who is now returning to the head office in San Francisco.

Mr. Grosjean was the recipient of many tokens of good fellowship and esteem from the assembled boxmen, and was presented with a candid camera as a mark of further favor. He was a familiar figure at the monthly golf tournaments and other social gatherings of box manufacturers in San Francisco, and his pleasing and dynamic personality made

him a welcome guest at those functions. His sterling qualities will stand him in good stead in his new position and he will have no difficulty in making social and business contacts in his new sphere of endeavor. He carries with him the best wishes of all his old associates in San Francisco.

His business colleagues staged a farewell party for him at the Elks Club during the previous week, which was attended by fifty of his fellow employees. It was a party that will be long remembered and its spontaneity and sincerity was a splendid testimonial to the esteem and affection in which he is held by his fellows. He carries with him, as a constant reminder of that regard, a beautiful wrist watch, which was presented to him at the conclusion of the proceedings.

## Collins Retires As Graham President

● Colonel M. J. Collins, president of the Graham Paper Company of St. Louis for fourteen years, has "moved over," as he puts it, but will remain with the company as an active director.

In a message to employees Colonel Graham said in part:

"After 56 years of active service I shall retire from the presidency at our annual meeting on January 24, while I am still in good health and have the capacity to fully enjoy well earned leisure.

"I am not severing my connection with this grand old company as I will remain an active director and continue to retain my holdings.

"I am very happy to announce that Charles W. Lewis, executive vice-president, who has worked shoulder to shoulder

with me for 45 years, will succeed me as president."

The Graham Paper was established in 1855 and is one of the largest paper jobbing houses in the world with twenty branches throughout the country. Graham handles all sales of the St. Helens Pulp & Paper Company's products.

The company has some interesting policies which were summarized by Colonel Collins at the time he retired from the presidency.

Every president and officer came up from office boy or clerk. Policy of rotation has always been sacredly followed. There is no law about officers retiring but they have had the good grace to do so about the time they reached the age of 70 or before, in order to give opportunity to the younger men to move up from the ranks.

This company was one of the first in the west to adopt profit sharing policy, where the common stock is owned entirely by active workers. There are over 200 stockholders at the present time. During the great depression we did not lay off a single person. The officers and important heads of departments and branch managers voluntarily took three reductions in salary before touching the salary of clerks or other employees.

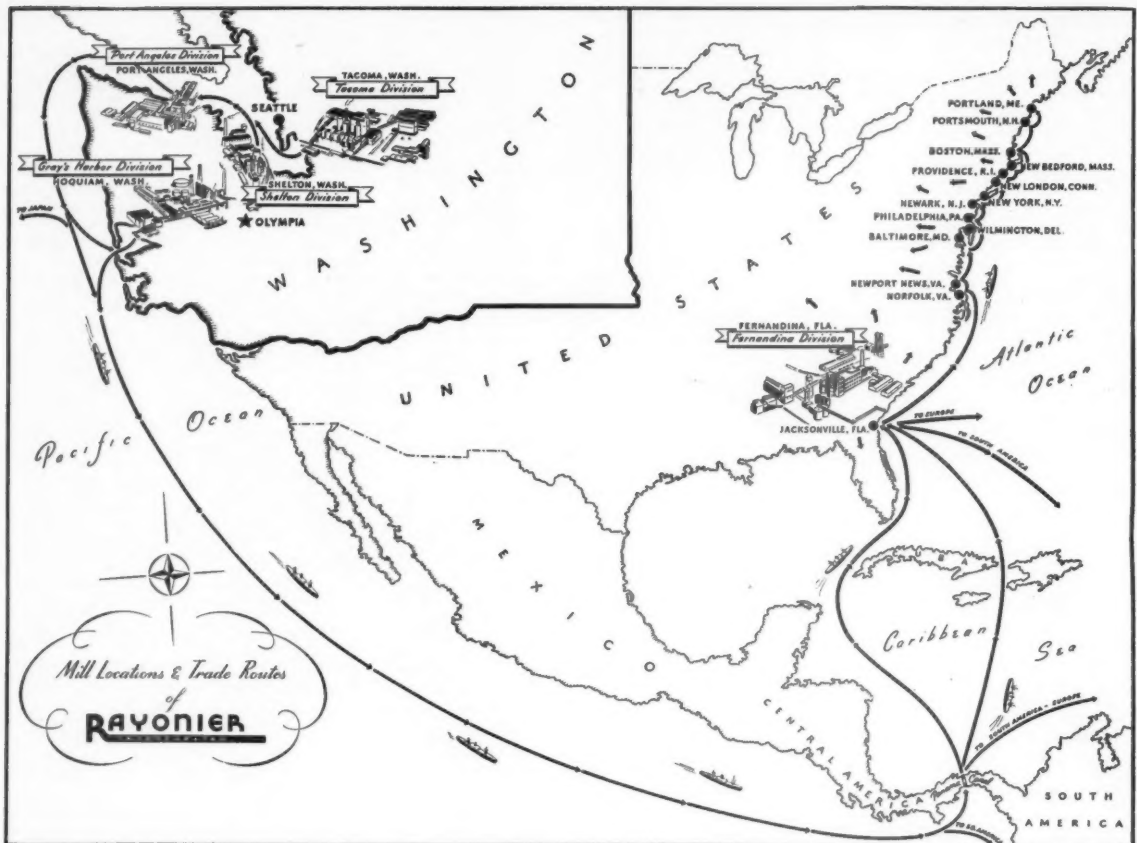
This firm never stops the salary of any one of its employees while they are sick or absent. In some cases employees have had impaired health and been off duty for two or three years, but their salary went on. Frequently, where we thought it would help the family, we have continued the salary of people, in warehouse and office, months after they passed away.

The Graham Paper Company has never had any labor trouble, and we have never laid anyone off because of old age.



**FRANK A. BORCHERS**, Sales Manager of the **OXFORD PAPER COMPANY** and the **OXFORD MIAMI PAPER COMPANY**, spent nearly three weeks on the Pacific Coast during the latter part of March and early April visiting the offices of **BLAKE, MOFFITT & TOWNE**, Oxford's Pacific Coast distributors. Mr. Borchers brought with him a display of fine printing on Oxford papers which he exhibited to Blake, Moffitt & Towne salesmen and to printers in the Pacific Coast cities visited. In the above picture with Mr. Borchers is **LEO P. CHAPMAN** (on the right) of Blake, Moffitt & Towne's Seattle Division. Mr. Borchers finished his Pacific Coast calls in time to return to his Chicago headquarters April 14th.





## Rayonier Mill Makes Eastern Debut

Rayonier's newest sulphite pulp mill ushered in the New Year by making its official bow at Fernandina, Florida.

By providing additional tonnage when a threat of wood pulp shortage caused buyers serious concern, Rayonier again demonstrated that it can be relied upon for a *continuous domestic source of supply*.

***Better Pulps for Better Performance***

# RAYONIER

INCORPORATED

**EXECUTIVE OFFICES:**  
343 SANSOME STREET  
SAN FRANCISCO

**MILLS:** FERNANDINA, FLORIDA  
HOQUIAM, WASHINGTON  
PORT ANGELES, WASHINGTON  
SHELTON, WASHINGTON  
TACOMA, WASHINGTON

**SALES OFFICES:**  
122 EAST 42ND ST.  
NEW YORK CITY

## Import Committee Reports on Kraft Paper Situation

● The United States Customs Court is clearing the records of several hundred pending cases which have been accumulating since 1931 on the finding by Customs officials that M. G. Kraft wrapping paper, imported from Sweden, had been undervalued.

In its decision the Customs Court ruled that the market "was a controlled market subject to conditions and restrictions fixed by a cartel agreement between wholesalers and dealers" and therefore there was no freely offered foreign value within the meaning of the Tariff Act.

These cases were decided on the basis of a decision which the Department of Justice refused to appeal, in which foreign price fixing is accepted as a legal means by which importers of foreign paper can evade the spirit of the United States tariff laws.

A Philadelphia case in which an importer was held to have undervalued about 1,500 rolls of grey kraft wrapping paper was decided in favor of the importer. The Court held that the failure of a Customs examiner to actually open 150 rolls, or one-tenth of the shipment, made the appraisal invalid, and the importer's valuation of the shipment is allowed to stand. The examiner had set aside 150 rolls for inspection because of a question whether the paper was properly marked with the country of origin. The examiner not only decided the question as to marking, but also held the paper to have been undervalued. The court, because the rolls had not actually been opened, held that no additional duty for undervaluation could be imposed. The technicality under which this ruling was handed down has been eliminated by a change in the Tariff laws since this case arose in 1937.

## Paper Mill Men Elect Officers

● The Paper Mill Men's Club of southern California will hold its annual election of officers at a special dinner meeting April 19 at the San Gabriel Country Club in San Gabriel, Calif.

Harry Fields heads the committee in charge of the meeting, assisted by Ansel A. Ernst. Golf playing members will meet on the links early for a round of golf.

## Posters Aiding Printers Hecht Finds

● Victor E. Hecht, vice-president, Zellerbach Paper Company, San Francisco, is back from a visit to the firm's northwest divisions, with the report that the "reminder selling posters" which the company has been publishing in a campaign to help printers help themselves, are very much in evidence.

It is interesting to note that other firms are adopting similar policies—for example the campaign of Wilson & Co., makers of sporting goods, who are advertising nationally in leading magazines on behalf of the golf professional. Like the Zellerbach Paper Company, Wilson & Co. keep their name very much in the background in this campaign, but hope to benefit by the good will which the copy should create.

## Sweden Short of Pulpwood

● The troubles of pulp producers in Sweden even before the German invasion of Norway, are briefly summarized in a report appearing in the March 15th issue of The Swedish Wood Pulp Journal. We quote:

"The brief spell of warmer weather following in the first week of March the unusually severe winter cold, has not eased the difficulties of transport to any great extent. The fuel problem has become acute, and we have been unable to obtain sufficient supplies of coal and coke. Public and private consumption of fuel have therefore been subjected to ever greater restrictions. Should the cold weather persist for any length of time, it is quite possible that some of the available stocks of pulp wood would have to be requisitioned by the authorities. Such a step would clearly be very detrimental to the mills concerned, and we must sincerely hope that it need not be resorted to. Several mills have had difficulty in obtaining new pulp wood in sufficient quantities, partly owing to the shortage of labor for the lumbering operations, and partly because the provision of fuel wood has now become of most importance. The wintry weather has also resulted in a serious drought, with a consequent shortage of water power, which is hitting the wood-grinding industry particularly hard.

"No decision has yet been made as regards special railway rates for pulp to the west coast ports. It is of the greatest urgency that such a decision should be reached in the immediate future, more especially in view of the difficulties of competing in the American market, which necessitate every possible economy in the way of transport.

"The effects of the recently introduced rationing of paper in Great Britain are not yet apparent. The world war proved that the consumption of paper could be quite considerably reduced, and presumably there will be a reduction also under present conditions. Considering the difficulties of the British pulp mills to obtain logs for grinding, however, there is some reason to think that the demand for pulp will only gradually diminish.

"The situation in the American paper market is on the whole unchanged. Orders are no longer coming in so freely, but both the paper and the pulp industries seem very busy on production to effectuate the orders in hand. The outlook is also regarded rather optimistically.

"In the first half of March activities in the cellulose market were mainly confined to small sales for prompt delivery. Production costs have risen again, and prices have had to follow suit. Some buyers no doubt wish to cover their requirements for some time ahead at fixed prices, but as the sellers can hardly estimate their costs beyond the immediate future, they are very chary of selling anything but small prompt parcels. Under the present abnormal conditions sellers are trying as far as possible to meet their old customers in respect of deliveries and price, however, and have even to some extent reserved the requisite cargo space for them.

"There is hardly any news in the mechanical pulp market. Sales have been few lately. Much will depend on developments in the British and French newsprint industry, but it is still too early to venture any guesses.

## The Paper Market

"There has been no marked change in the export market for Swedish paper during the first half of March. Interest has been rather active, especially in wrappings, and on the whole orders have been coming in rather satisfactorily from the quantitative point of view. The new British licensing system for paper imports came into force on March 3, but its effects on the Swedish exports to Great Britain cannot as yet be judged with any certainty, though the allocation of licenses to import from Sweden seems to have been fairly liberal in the first weeks. This may, however, change to some extent as time goes on, but—as we have said—no opinion can yet be expressed on that point.

"The Swedish paper mills are at the moment busy, and have generally sufficient orders in hand to keep work going for some time. Several of them are troubled by the water shortage, and have difficulties to obtain coal and other supplies. The wood supplies of mills making their own pulp have in many cases been delayed by the severe cold, and by shortage of labor, and the cutting of firewood also seems to have interfered with the felling of pulp wood. All these difficulties tend to increase the production costs of the mills.

"In the home market for newsprint, the publishers and the mills agreed on March 7 to raise the basis price of newsprint for the second quarter of 1940 to 22 ore per kilo for paper in reels. During the first quarter the price was 22 ore, and earlier still 18.25 ore per kilo."

## Swedish Weather

"In the first week of March the temperature was on the whole normal for the time of the year, but in the second week it again fell to between 20 and 30 centigrades of frost during the nights in the central and southern parts of the country, where more snows also fell, especially in the extreme south, and it is thought that it will still be some time before traffic can be resumed through the Sound. The ice in the upper Baltic and the Gulf of Bothnia has been thickened by the persistent cold. It is still very uncertain when the ports north of Gåvle can be re-opened, as large parts of the Gulf are still completely ice-bound. Open water will certainly be very late this year.

"Lumbering conditions are now more favorable, even though the cold is still making barking in the forests difficult. Although the shortage of axe-men has to some extent been relieved by the granting of leave by the military authorities, it is still a factor of importance in many districts, and the lumbering operations have been considerably delayed in many parts by the cold and the shortage of labor. Operations will be more extensive than usual this year on account of the necessity of providing more firewood. As the demand for fuel is very strong, more especially in the south of Sweden, the small forest owners are apparently going in so strongly for meeting this, that the cutting of pulp wood is suffering.

## Frank Has Appendix Removed

● Ludwig Frank, assistant treasurer in charge of Crown Willamette Paper Co., Division credits, Crown Zellerbach Corp., San Francisco, recently underwent an appendectomy.

# Effect of Age and Growth Rate on Sulphite Pulp From Western Hemlock

by G. H. CHIDESTER, Senior Engineer,  
and J. N. McGOVERN, Assistant Technologist\*

## Summary

● Five trees of western hemlock covering a wide range in age and rate of growth exhibited a wide variation in physical and chemical properties. Relationships between the rate of growth, density, springwood and cellulose contents were evident, especially in the young trees.

Yields of pulp from the five trees varied from 43.2 per cent to 48.1 per cent on a weight basis and from 10.1 to 13.3 pounds of pulp per cubic foot of solid wood. The yields from the old trees were generally lower than from the young trees and decreased with increasing springwood content, increasing rate of growth, decreasing density and decreasing cellulose contents.

The bursting and tensile strengths of the pulps increased with increasing springwood content, increasing rate of growth and decreasing density.

The tearing strength decreased markedly with increasing springwood content, increasing rate of growth and decreasing density. The tearing strengths of pulps from the old trees were somewhat lower than those of pulps from the young trees.

## Introduction

● Previous investigations at the Forest Products Laboratory have shown the dependence of the yield and quality of pine pulp upon the

\*Forest Products Laboratory, Forest Service U. S. Department of Agriculture. Maintained at Madison, Wisconsin, in cooperation with the University of Wisconsin.

growth characteristics of pulpwood. A systematic examination of western hemlock (*Tsuga heterophylla*), covering similar factors, has been undertaken. Information on the effect of the position of wood in the tree and of the relative amounts of heartwood and sapwood are being discussed in separate reports. The experiments described in this report were undertaken to obtain information on the effect of age and growth rate upon the yield and properties of sulphite pulp from this species.

For this purpose five trees were selected by the Pacific Northwest Forest Experiment Station to represent as nearly as possible the range of the properties of age and growth rate found in western hemlock pulpwood. The trees were classified as follows: Old trees having slow and rapid rates of growth, young trees having slow and rapid rates of growth and a very young, very rapid-growth tree (fig. 1). All trees more than 100 years of age were arbitrarily termed "old."

## Experimental Part

● The yields and properties of the pulps from each of the five trees were determined by digestion of middle logs from each type of tree. The physical and chemical properties of the wood, determined according to customary methods, are given in table 1, where the data have been arranged in the order of decreasing growth rate.

The logs were chipped in the usual manner to  $\frac{3}{8}$ -inch chips,

which were screened and digested under conditions that were the same in all instances (table 2). By means of four baskets placed in a 50-pound experimental digester, four wood samples could be digested at the same time. Thus, the two old-growth and two young-growth woods were pulped at the same time, three check digestions being made. Then the very young, very rapid-growth wood and the old, rapid-growth wood were pulped at the same time, two check digestions being made. The yields and properties of the pulps from the old, rapid-growth wood pulped in the two sets of check digestions proved to be the same. The data given in table 2 on the yield and properties of the pulps thus obtained are average values for check determinations.

The bleach requirement of the pulps was determined by the single-stage hypochlorite method using the amount required for a blue color of 85 Ives parts as the standard for comparison. Both pebble mill and beater tests were made on the combined pulps according to a standard procedure. The various strength properties were plotted against the freeness values developed during the processing and the strength properties corresponding to Schopper-Riegler freeness values of 800 cc and 550 cc taken for the comparisons (table 2). Only the results from the beater tests are presented since similar trends were shown by both methods.

TABLE I

Physical and Chemical Properties of the Middle Logs of Western Hemlock of Five Growth Types

Age class	Growth class	Annual rings per inch	Density	Springwood content (vol.)	Age	Chemical Analysis								
						Cellulose	Alpha cellulose	Lignin	Pentosans			Extractives		
									Total	In cellulose	Alcohol benzol	Ether	1 per cent NaOH	Hot water
		No	Lbs. per cu. ft.	Per cent	Years	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Very young	Very rapid	4.5	22.3	( <sup>1</sup> )	36	58.8	41.2	29.3	8.8	5.4	2.3	0.1	12.8	3.5
Young	Rapid	9.4	23.6	70	75	59.9	42.1	29.5	8.8	5.3	2.1	.2	11.3	2.6
Old	Rapid	14.0	23.0	66	137	59.2	41.0	29.5	9.4	5.3	3.1	.6	12.5	3.5
Young	Slow	23.9	27.6	58	79	61.0	45.0	29.3	8.9	5.1	1.3	.3	10.4	1.3
Old	Slow	46.3	25.9	60	320	56.2	41.3	28.2	8.4	5.1	6.6	1.1	14.8	4.9

<sup>1</sup>Springwood-summerwood boundary too indefinite for good estimate: Springwood content easily seen to be 75 per cent or more. A value of 75 per cent was used in plotting relationships.



### Discussion

● The old and young trees differed in certain of their physical and chemical properties and in the yields and characteristics of the pulps obtained from them. Considering the group as a whole, definite trends can be shown for the relationships between many of the properties. However, the clearest relationships are shown between growth rate, density and springwood content, and the distinction between the old and young trees becomes very apparent by considering the young growth material separately, as in figure 2. A decrease in the proportion of springwood and increase in density is shown for an increase in the number of growth rings per inch. The density, in turn, decreased with increasing springwood content. Although the number of samples was too few to establish satisfactory average relationships, the trends conform to those generally reported for most species.

A considerable variation is noticeable in the chemical composition of the five woods, particularly in the amounts of cellulose and extractives. The highest cellulose content and lowest amounts of extractives are shown by the young, slow-growth wood. The opposite extreme is shown by the values for the old, slow-growth wood. Even in the few samples available consistent relationships can be shown between the cellulose and alpha cellulose contents of the young material and the proportion of springwood and, in turn, the density and growth rate. As the amount of springwood increased in the young growth decreases in the cellulose contents are evident in figure 3. Here, again, the old and young-growth woods are very distinct, the old wood having appreciably lower cellulose contents.

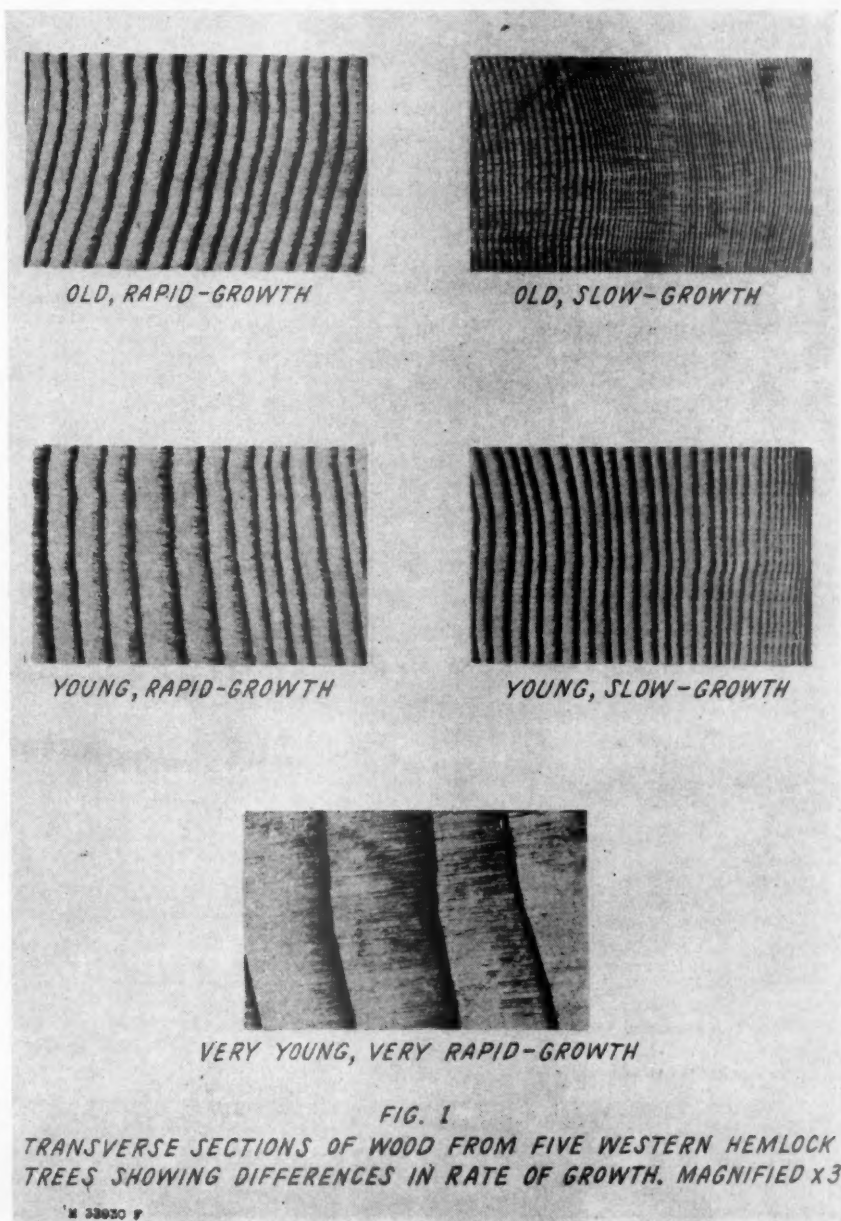
The differences in chemical composition can also be partly accounted for by the different proportions of heartwood and sapwood in the various samples since heartwood has, in general, lower cellulose and higher extractive contents than sapwood. (The percentage of heartwood varied from 30 per cent in the young, slow-growth material to 47 per cent and 48 per cent in the very young, very rapid growth and the young, rapid-growth woods; and from 62 per cent in the old, rapid-growth to 71 per cent in the old, slow-growth material.) The differences found in the cellulose contents of heartwood and sapwood, however, were not sufficient to account for the differences found in the woods of the different growth types.

### Pulp Yields

● The pulp yields from the five woods varied considerably, ranging from 43.2 to 48.1 per cent, a difference of 4.9 per cent based on the wood or 11.3 per cent based on the pulp. Because of the relation between the physical and chemical properties of the woods these differences in yield appear to be closely related to certain of the physical as well as chemical properties of the woods. The decrease in yield with increasing springwood content of the young-growth material, and the increase in yield with increasing alpha cellulose and cellulose contents are shown in figure 4. An

increase in yield for the young-growth material with increasing density and increasing number of growth rings per inch are also shown. The data obtained on old-growth material are too meager to warrant any discussion of yield other than that relatively low pulp yields were obtained from the old-growth woods. This low pulp yield is the result of the low cellulose and relatively high extractive content of the old-growth wood.

The pulp yield, as well as the chemical composition of the wood is affected to some extent by the different proportions of heartwood and sapwood. In spite of the fact that a fairly good relationship be-



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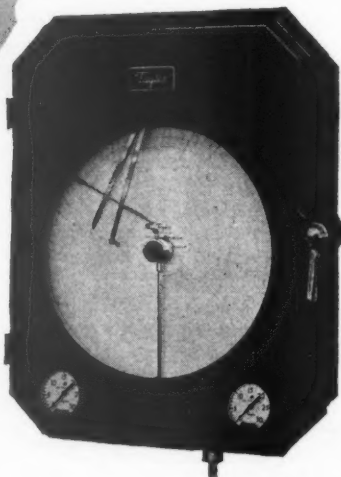
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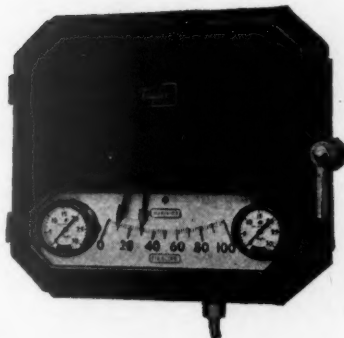
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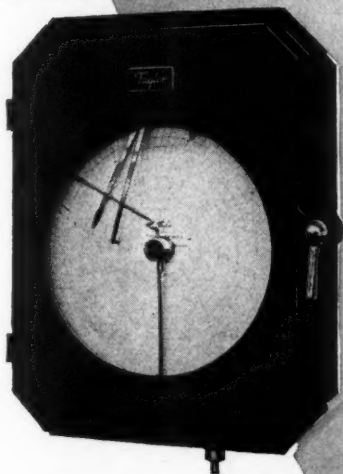
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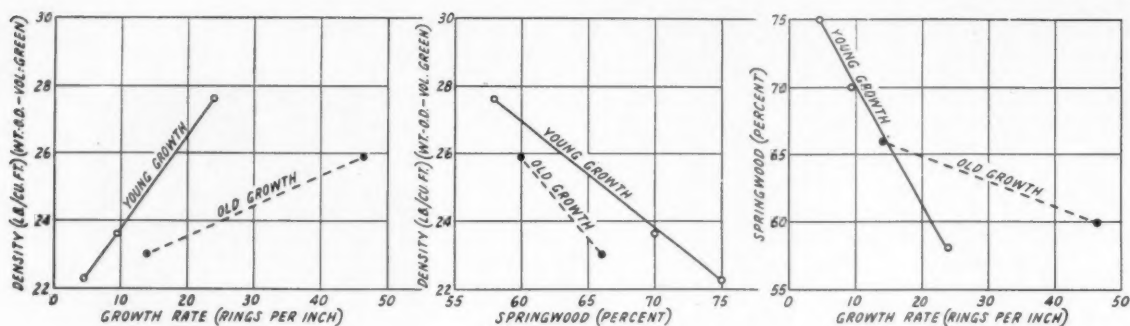


FIG. 2  
RELATION BETWEEN GROWTH RATE, DENSITY, AND SPRINGWOOD CONTENT  
IN WESTERN HEMLOCK OF FIVE GROWTH TYPES

tween the yield and the percentage of heartwood is shown in figure 4, and, that if the samples are representative, the heartwood content might be considered a fairly good indication of the yield, the differences in the yields of pulp from the various samples are much greater than the differences (2 per cent or less) found for heartwood and sapwood alone. Evidently the increases in the proportion of heartwood were accompanied by other changes in the chemical composition of the wood.

Relations between the yield of pulp per cubic foot of solid wood, similar to those shown for the yield calculated on a weight basis and the springwood content, density and growth rate are shown in figure 5. On a volume basis even greater differences in yield than those calculated on a weight basis are evident. The young, slow-growth wood yielded over 30 per cent more pulp per cubic foot of solid wood than did

either the very young, very rapid-growth or the old, rapid-growth wood. In these instances the trends indicated by the old-growth material are more consistent with those exhibited by the young-growth.

#### Bleach Requirement

● Since all the digestions were carried out under similar conditions, the close agreement in the bleach requirement of the pulps indicates the same ease or rate of pulping, at least under the conditions used, for all the woods regardless of age, class, growth rate, density or springwood content. However, it is possible that higher temperatures in the early part of the digestion might have shown differences, especially in the amount of screenings, resulting from different rates of penetration of the liquor into the chips.

#### Strength Properties of the Pulps

● The bursting and tearing strengths corresponding to the springwood contents of the wood

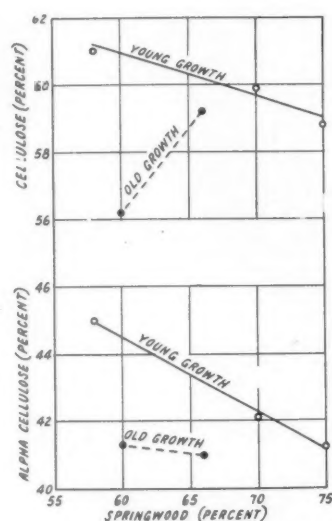


FIG. 3  
RELATIONS BETWEEN CELLULOSE AND  
ALPHA CELLULOSE AND SPRINGWOOD CONTENTS OF  
WESTERN HEMLOCK OF FIVE GROWTH TYPES

TABLE II

Summary of Results of Sulphite Digestions of Western Hemlock of Five Growth Types

Age Class	Wood <sup>1</sup> Growth Class	Digestion <sup>2</sup> results		Beater Strength Tests 25x40—500 Ream										
				Bursting strength		Tearing strength		Tensile strength		Solid fraction		Beating time		
		Standard bleach requirement for Total <sup>3</sup> 85 parts yield blue	Freeness		S. R.		Freeness		S. R.		Freeness		S. R.	
			800	550	800	550	800	550	800	550	800	550	800	550
			cc.	cc.	cc.	cc.	cc.	cc.	cc.	cc.	cc.	cc.	cc.	cc.
Percent		Percent		Points per pound per ream		Grams per pound per ream		Pounds per square inch		Minutes				
Very young	Very rapid	45.3	11	1.22	1.39	1.39	1.25	8,900	11,250	0.52	0.57	22	68	
Young	Rapid	46.0	13	1.20	1.40	1.75	1.50	7,350	10,000	.50	.57	22	62	
Old	Rapid	43.8	11	1.13	1.37	1.72	1.46	7,300	9,300	.48	.53	18	57	
Young	Slow	48.1	12	1.10	1.36	1.92	1.68	7,000	9,900	.50	.55	22	62	
Old	Slow	43.2	11	1.11	1.36	1.75	1.50	7,850	9,750	.48	.56	18	57	

<sup>1</sup>The middle logs were used in all digestions.

<sup>2</sup>The digestion conditions were held constant throughout and were as follows:

(a) Cooking liquor—5.5 per cent total and 1.15 per cent combined sulphur dioxide.

(b) Temperature schedule—1.5 hours to 110° C., held at 110° C. for 1 hour, 1.5 hours to 140° C., and held at 140° C. for 5.5 hours; total digestion time: 9.5 hours.

(c) Pressure: 75 pounds per square inch maximum.

<sup>3</sup>The screenings varied from 0.1 to 0.2 per cent.

samples are shown in figures 7 and 8. Since the springwood content, growth rate and density of the wood are related properties, relationships can also be shown between the strength properties of the pulps and the growth rate and density of the wood.

It is, of course, impossible to determine accurately from these data the independent effects of the proportions of springwood and summerwood, density, rate of growth, fiber length and other less known factors. However, the differences in cell wall thickness in the springwood and summerwood fibers and the differences in the proportions of springwood and summerwood are much more readily apparent than any differences in the springwood or summerwood fibers themselves resulting from differences in age, rate of growth or density (fig. 6). The differences in the pulp properties are therefore more likely to be

due to the differences between the springwood and summerwood fibers than to the other factors.

In considering the possible effect of the different proportions of heartwood and sapwood on the strength properties of the pulps it again appears that the influence of heartwood and sapwood alone is a factor of less importance than the proportions of springwood and summerwood. An increase in the amount of heartwood would tend to result in increased bursting and tensile strengths and decreased tearing strength. The differences in the heartwood content of the various samples would tend slightly to enhance the effect indicated for the proportion of springwood in the young material and would tend to nullify that indicated for the old wood.

Although only small differences in the bursting strengths of the pulps at 550 cc freeness resulted

from the various woods, there was a slight increase as the springwood content increased (fig. 7). At 800 cc freeness the increase in bursting strength with increasing springwood contents was greater. There was very little difference in the bursting strengths of the pulps from the old and young wood.

● The tearing strengths of the pulps varied considerably more than the bursting strengths. As the proportion of springwood increased the tearing strength decreased markedly (fig. 8), the decrease being correspondingly greater than the increase in bursting strength.

The tensile strengths (not plotted) showed a relationship to the springwood content similar to that exhibited by the bursting strength, increasing in value with increasing springwood content.

The differences in the solid fraction of the test sheets from the var-

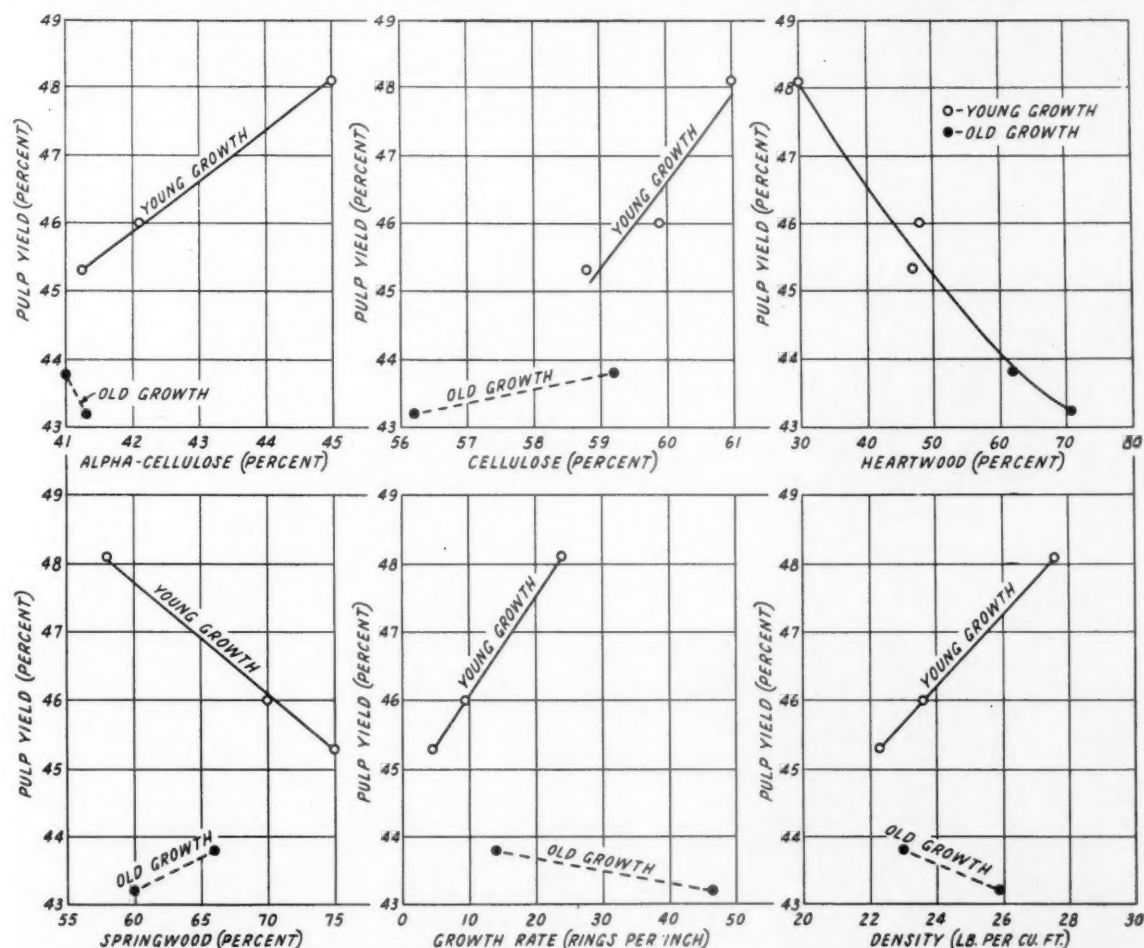


FIG. 4  
RELATIONS BETWEEN CHEMICAL AND PHYSICAL PROPERTIES OF THE WOOD  
AND PULP YIELD (PERCENT OF O.D. WOOD) FROM WESTERN HEMLOCK OF FIVE GROWTH TYPES

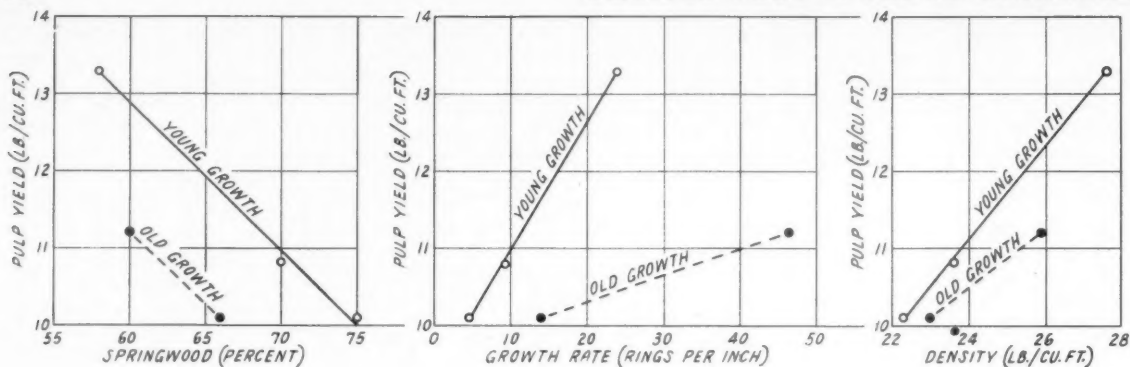
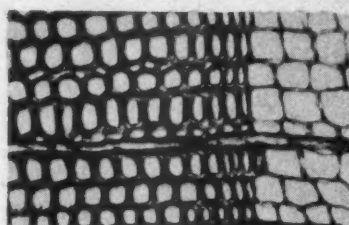
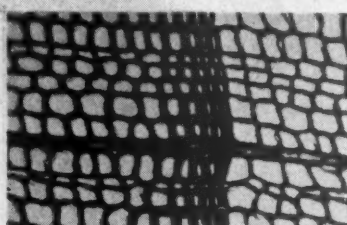


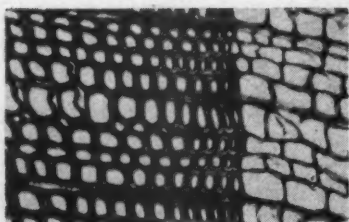
FIG. 5  
RELATION BETWEEN PHYSICAL PROPERTIES OF THE WOOD AND PULP YIELD  
(LB. PULP PER CU. FT. SOLID WOOD) FROM WESTERN HEMLOCK OF FIVE GROWTH TYPES



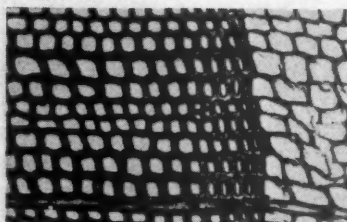
OLD, RAPID-GROWTH



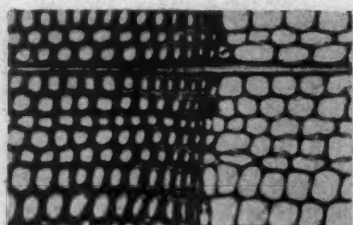
OLD, SLOW-GROWTH



YOUNG, RAPID-GROWTH



YOUNG, SLOW-GROWTH



VERY YOUNG, VERY RAPID-GROWTH

FIG. 6  
TRANSVERSE SECTIONS OF WOOD FROM FIVE WESTERN HEMLOCK  
TREES SHOWING SPRINGWOOD (THIN-WALLED CELLS, RIGHT) AND  
SUMMERWOOD (THICK-WALLED CELLS, LEFT). PHOTOMICROGRAPH X150

W 33931 P

ious pulps, and the beating time required to produce the same freeness were small. There was a slight tendency for both to increase with increasing springwood content. The pulp from the old wood appeared to require less beating time to produce a given freeness than did that from the young wood.

The general trends of the various strength properties of the pulps in relation to the springwood content were similar to those found for the southern pine.

### Conclusions

● The several samples of western hemlock pulpwood covering a wide range in age and rate of growth showed a considerable variation in both physical properties and chemical composition which materially affected the yield and strength properties of the sulphite pulps prepared from them. Consistent relationships between the rate of growth, density, springwood content and cellulose content were evident, especially in the young material. In this study as the rate of growth increased the density decreased, the springwood content increased, and the cellulose content decreased. Distinct differences in the cellulose and extractive contents of the old and young trees were also apparent, the old trees having lower cellulose and higher extractive contents than the young trees.

The yield of pulps from the several wood samples varied widely from 43.2 to 48.1 per cent on a weight basis and from 10.1 to 13.3 pounds per cubic foot of solid wood, a difference of 32 per cent on the latter basis. In general, the pulp yields were considerably lower from the old than from the young trees. For the young growth the pulp yields decreased with increasing



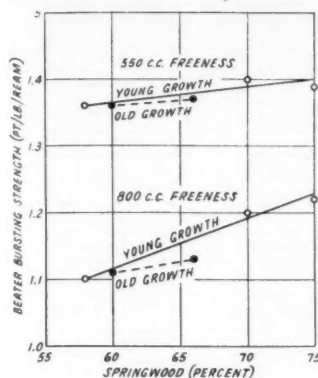


FIG. 7  
RELATIONS BETWEEN BEATER BURSTING STRENGTHS  
AND SPRINGWOOD CONTENTS  
OF WESTERN HEMLOCK OF FIVE GROWTH TYPES

springwood content, decreasing density, increasing rate of growth, and decreasing cellulose contents. There was little difference in the rate of pulping of the various samples since

approximately the same degree of cooking as indicated by the bleach requirement, was obtained in the same time.

The strength properties of the pulps were probably most dependent on the proportion of springwood but also varied with the density and rate of growth. The bursting and tensile strengths increased, especially at a high freeess value with increasing springwood content, decreasing density and increasing growth rate. The tearing strength decreased markedly with increasing springwood content, decreasing density and increasing growth rate. The pulps from the old trees gave somewhat lower tearing strengths than the pulps from the young trees. The trends of the various strength properties in relation to the springwood content were similar to those previously found for southern pines.

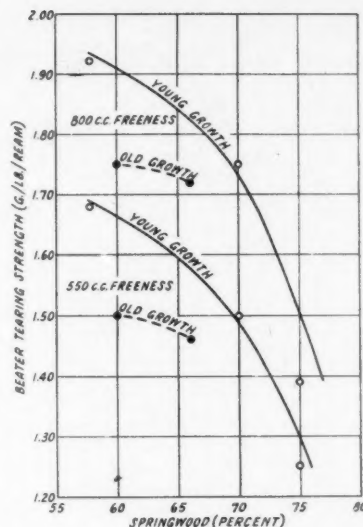


FIG. 8  
RELATIONS BETWEEN BEATER TEARING STRENGTHS  
AND SPRINGWOOD CONTENTS  
OF WESTERN HEMLOCK OF FIVE GROWTH TYPES

## Rayon for Tires Further Improved

● At the 99th meeting of the American Chemical Society held early in April in Cleveland, Ohio, new developments in the manufacture of rayon for tires were announced by William H. Bradshaw, director of rayon research for E. I. du Pont de Nemours & Company.

Mr. Bradshaw was reported as telling the chemists that the new Cordura rayon yarn is 3,000 per cent sturdier than standard and has a tensile strength higher than structural steel. Tires made with the new yarn ran 80,000 miles under conditions which destroyed an ordinary tire at 3,000 miles.

The secret of the new yarn's strength Mr. Bradshaw was quoted as saying, lies in its ability to maintain strength at high temperatures. It is as safe from blowouts at 105 degrees as the ordinary cotton tire is at 75 degrees.

"Cotton loses its strength as the moisture is removed, while 'Cordura' increases in strength. Because of this, rayon loses only 12 per cent of its normal strength when heated to 250 degrees, while cotton cords lose from 30 to 56 per cent.

"The finished Cordura is cotton in the same sense that the piano wire is iron," he said. "Wire begins as a billet of refined iron and is stretched until it has the right diameter and physical properties. In Cordura, a strength of 70,000 pounds to the square inch is obtained by the simple process of stretching the filaments."

The chief weakness of ordinary cotton fibre tires lies in the fact that in a single length of cord "there are at least 60,000 cotton fibres," Bradshaw said, "and that means 60,000 breaks in the continuity of the structure."

The rayon cord is a "continuous filament of rayon which completely eliminates this handicap and permits whatever combination of twists in singles, -lys and cord may be desired to obtain the utmost in resistance to fatigue, rupture and other failure," he said.

## Waste Wood for Northwest Steel Making?

● In line with recent stories appearing in the daily press concerning the federal government's interest in establishing an iron and steel industry in the Pacific Northwest to consume some of the vast amount of electrical energy which will soon be available, is one announcing a processed charcoal to be made from waste wood.

The announcement in the press states that Dr. Steven Ruzicka has developed and applied for patents on a process for making charcoal strong enough to withstand the severe pressures of a blast furnace. It is claimed to be in effect a "wood coke," but 95 per cent pure carbon instead of 82 per cent pure carbon

for the coke made from coal. This greater purity of the charcoal will give the iron greater strength and greater corrosion resistance it is claimed.

As the Pacific Northwest has ample quantities of wood waste and no coking coal of the quality needed the new process is expected to solve one of the more serious problems confronting an embryonic Pacific Northwest iron and steel industry.

The charcoal process is employed in manufacturing Swedish type steel which brings the highest prices because of its exceptional qualities. Charcoal iron is the basis also for many steel alloys and, should the process prove as practicable as expected, would form the basis for new electrometallurgical and electrochemical industries in the Pacific Northwest.

Charcoal iron is already produced in the United States but it represents only about 2 per cent of all steel made here. Its quantity production has been prevented by the brittleness of charcoal which tends to pulverize under pressure. For this reason it has been impossible to use it in blast furnaces where it would have to withstand the pressure of tons of ore.

In addition to permitting quantity production, the new charcoal process reduces the cost of charcoal iron, it is claimed, through the production of a by-product of almost equal value, a quick hardening cement. This cement is said to harden in four hours as compared with a 28-day hardening period required for some commercial cements.

The new type charcoal may offer a profitable outlet for certain types of waste wood and hence is of interest to the pulp and paper industry of the Pacific Northwest.



# The Manufacturer And the Public Interest

by R. E. KIMBALL\*

OUR COUNTRY is still faced with a serious unemployment situation and huge surpluses. The crying need of our time is to solve this problem—why, with our enormous facilities for producing and our large surpluses, cannot we distribute this production to those who need it and give work to all who desire to work? Industry is repeatedly asked what it is going to do about it, and recently the question has again been asked, Why is there so much idle money?

It is only human nature for every manufacturer and every employer to want better business, larger markets, and a greater public buying power. Similarly, any one who has idle money would like to have it earn more. So it certainly isn't through any lack of desire on the part of industry that industry has not solved this pressing problem.

Then the reason must be either that industry has not the ability to solve the problem or that it has not had the opportunity to do so. The business men of this country have shown throughout our history that they have solved similar problems far more satisfactorily than they have been solved in any other country. It is needless for me to elaborate on our high standard of living. But I claim that the problem of unemployment and surpluses is a business problem and who can solve it better than the business men of this country?

Therefore I come to this point: if it is not the lack of desire of industry nor the lack of ability of our business men to solve this problem, it must be that they have not had the opportunity to do so. And the reason for this is the bug-a-boo about "monopoly" and "free competition." Cries have been continuously made about monopoly, restraint of trade and threats of prosecution under our anti-trust laws. The cries have been so loud and insinuating that the public has been led to think of monopoly as the blackest of crimes and very few have had the courage to answer these cries. But monopoly is not necessarily bad—in fact we have come to think of the supplying of water, gas, electricity, telephone service and mail service, as monopolies which are good or at least preferable to free competition. We certainly would consider it very inefficient and not to the public interest if two or three concerns were competing for our mail or delivering letters to the same offices. Also it would not be to the public interest to have several concerns digging up our streets, laying competitive water mains, and competing for our business—perhaps changing our source of water supply every six months or yearly. We can visualize very clearly the extra costs and higher prices that would prevail under such conditions.

We have been educated on the statement that "competition is the life of business" and nearly every one will say,

"Oh, yes, there must be competition." But the public has already accepted the complete elimination of competition in the instances of mail, water, gas, etc., and it is generally admitted that this is in the public interest.

In reality competition can be beneficial or not beneficial depending upon circumstances. On the one hand competition can be beneficial to the public interest if it promotes more efficient methods of production, distribution and selling, and thereby permits lower prices. It is also beneficial if it promotes better and more desirable products and services.

On the other hand, competition is not beneficial to the public interest if prices are lowered to such an extent that wages and the quality of the products are adversely affected, and the safety of invested capital threatened. It is also not beneficial if services are duplicated to such an extent that costs are materially higher.

Perhaps this discussion might be more simply stated as follows: Public interest is promoted if goods or services are sold at the lowest prices which still permit satisfactory wages and working conditions for labor, a satisfactory return on capital invested and an equitable return to management.

Now the reverse of this statement is also true—public interest is not promoted if prices are forced so low that wages and working conditions are adversely affected, if invested capital does not receive a satisfactory return, and if management is not sufficiently compensated.

Very little need be said to you or to the general public about the adverse effect on wages and working conditions if prices are forced too low because it is self-evident that labor which constitutes a large portion of the public would have a lower buying power.

However, the effect on capital and management is not so evident. If prices are so low as to be unprofitable, there will be no return to capital, and in fact, part of the capital may be used up or lost. In such events those who own capital are reluctant to use it—they do not wish to dissipate it; and to entice it into use, there must be some return. Management also must receive its reward. If prices are forced so low by competition that operations are not profitable, there will be little reward for management. This either causes management to be discouraged and take a defensive attitude or causes it to move into other fields or wait for better opportunities.

● Here it might be well to state a truism which is not generally comprehended by the public. Neither labor, capital, nor management can do anything by itself. Neither can any two of them do any-

thing without the third. We have today a great amount of unemployed labor and idle capital. They can do nothing without an enterpriser (or management, as I prefer to call it) to get them all together and direct them.

Therefore, it is to the public interest that competition should be so regulated that prices will not be forced so low as to adversely affect labor, capital or management. How is this regulation or competition to be brought about? I don't believe it can be done by passing a lot of laws and orders. We have too complicated a problem and conditions vary so from industry to industry that no set of laws would be applicable. I believe the general policy can and should be stated in a law which permits the regulation of competition so far as any regulations or restraints of trade are in the public interest. The details of the regulation of competition should be left to each individual industry to solve and then be judged by the courts if it is or is not in the public interest.

This will require a change in our Sherman Anti-Trust Act, or at least a change in the manner in which it has been interpreted by our Supreme Court. It is generally accepted that this Act was intended to incorporate into our law the English common law against unlawful restraints and monopolies. The Act makes every contract, combination or conspiracy "in restraint of trade or commerce" illegal and makes it a misdemeanor for any person to monopolize or to attempt to monopolize or to combine or conspire with any other person or persons to monopolize any part of the trade or commerce.

While the laws of the two countries, England and United States, have been the same, there has been a wide difference in the interpretation of the law by the highest courts of the countries. Our Supreme Court has been dominated by the concept that preservation of price competition is of benefit to the public. The highest English courts do not place such reliance upon price competition as promotive of public interest, and conclude that under certain conditions it may be destructive thereof.

## American View of Competition

● Our organization, Stevenson, Jordan & Harrison, has made a study of the decisions of our Supreme Court and the highest English court, and while I could read a number of extracts from the decisions in substantiation of the interpretations, I will confine myself to only a few as my time is limited.

In *United States v. Trenton Pottery Company* (273 U. S. 392), which involved an association of manufacturers

"Competition can be beneficial to the public interest if it promotes more efficient methods of production, distribution and selling, and thereby permits lower prices. It is also beneficial if it promotes better and more desirable products and services."

\*Presented at the twenty-fifth annual convention of the Pacific Coast Paper Box Manufacturers Association, Del Monte, California, June 26-28, 1939.

**"On the other hand, competition is not beneficial to the public interest if prices are lowered to such an extent that wages and the quality of the products are adversely affected, and the safety of invested capital threatened. It is also not beneficial if services are duplicated to such an extent that costs are materially higher."**

controlling 82% of pottery fixtures for bathrooms and lavatories produced in the United States—the purpose of the association being to fix prices and to limit sales to jobbers, the Court said:

"That only those restraints upon interstate commerce which are unreasonable are prohibited by the Sherman Law was the rule laid down in the opinion of this court in the Standard Oil and Tobacco cases. But it does not follow that agreements to fix or maintain prices are reasonable restraints and therefore permitted by the statute merely because the prices themselves are reasonable. . . . Whether this type of restraint is reasonable or not must be judged in part at least in the light of its effect on competition for whatever difference of opinion there may be among economists as to the social and economic desirability of an unrestrained competitive system, it cannot be doubted that the Sherman Law and the judicial decisions interpreting it are based upon the assumption that the public interest is best protected from the evils of monopoly and price control by the maintenance of competition.

"The aim and result of every price fixing agreement, if effective, is the elimination of one form of competition. The power to fix prices, whether reasonably exercised or not, involves power to control the market and to fix arbitrary and unreasonable prices. . . . Moreover, in the absence of express legislation requiring it, we should hesitate to adopt a construction making the difference between legal and illegal conduct in the field of business relations depend upon so uncertain a test as whether prices are reasonable—a determination which can be satisfactorily made only after a complete survey of our economic organization and a choice between rival philosophies."

Likewise in the *Albert Pick-Barth Co. v. Mitchell Woodbury Corporation* (36 F. 2d 96), the Court said:

"Whether a conspiracy is legal or illegal, is a question of law depending on the facts proven as to the nature of the conspiracy. If it is a price-fixing combination, it is not a question to be proven whether the prices fixed are reasonable; but if it is found that the purpose of the combination is to fix prices, as a matter of law it is a conspiracy or combination in unreasonable restraint of trade, *United States v. Trenton Potteries Co.*, 273 U. S. 392, because it restricts competition to which the public is entitled."

#### English View of Competition

● The foregoing gives you a picture of the policy of our American court. The English take a far different view of the necessary effect of such contracts upon the public interest. They conclude that such contracts fixing prices and allocating business not only are not intrinsically inimical to the public interest but often-times serve and promote that interest. Here is what they say:

In *Northwestern Salt Company Ltd. v. Electrolytic Alkali Company Ltd.* (1914) A. C. 461, which involved an association by contracts of practically

all the producers of salt in England the Chancellor in his opinion said:

"Unquestionably the combination in question was one the purpose of which was to regulate supply and keep up prices. But an ill regulated supply and unremunerative prices may in point of fact be disadvantageous to the public. Such a state of things may, if it is not controlled, drive manufacturers out of business, or lower wages and so cause unemployment and labor disturbance. It must always be a question of circumstances whether a combination of manufacturers in a particular trade is an evil from a public point of view. . . ."

"It may be, for all that appears, that agreements of this kind were the only effective method of preventing domestic competition from being carried to a length which would ultimately prove not merely ruinous to the parties themselves, but injurious to the public even outside that portion of it which depended on the prosperity of the Salt Manufacturing Industry."

Lord Parker in a concurring opinion said:

"The competition between salt producers within the area covered by the agreement of September 11, 1906, either inter se or with salt producers outside this area, may have been so drastic that some combination limiting output and regulating competition within the area so as to secure reasonable prices may have been necessary, not only in the interest of the salt producers themselves but in the interest of the public generally, for it cannot be to the public advantage that the trade of a large area be ruined by cut throat competition."

In *Australia v. The Adelaide Steamship Company Ltd.* (1913) A. C. 781, the English Court of last resort dealt with an association by contracts of practically all the producers of coal in Newcastle district and of several steamship companies. The Court reached the following conclusions as evidenced by the opinion of Lord Parker:

"In the present case, however, it was proved that the prices prevailing when negotiations for this agreement commenced were disastrously low owing to the 'cut throat' competition which had prevailed for some years. . . . It can never, in their Lordships' opinion, be of real benefit to the consumers of coal that colliery proprietors should carry on their business at a loss, or that any profit they make should depend on the miners' wages being reduced to a minimum. Where these conditions prevail the less remunerative collieries will be closed down, there will be a great loss of capital, miners will be thrown out of employment, less coal will be produced, and the prices will subsequently rise until it becomes possible to open the closed collieries or open other seams. The consumers of coal will lose in the long run if the colliery proprietors do not make fair profits or the miners do not receive fair wages. There is, in this respect, a solidarity of interest between all members of the public. The Crown, therefore, in their Lordships' opinion, can-

not rely on the mere intention to raise prices as proving an intention to injure the public. To prove an intention to injure the public by raising prices the intention to charge excessive or unreasonable prices must be apparent."

This gives you the policy of the English Court.

In closing, I would like to point out that if government should regulate an industry, it would insist upon it being operated in the public interest. Therefore, our anti-trust laws should be changed to permit each industry to regulate itself in the public interest.

● This would mean regulating competition so that it promotes greater efficiency, better products and reasonably low prices but at the same time eliminates "cut throat" competition and thereby permitting fair wages to labor and a satisfactory return to capital and management. This would create an incentive for the enterpriser or management to use more labor, and more capital, and thus assist in solving our pressing problem of unemployment and huge surpluses.

#### Rayon Production Holding Up Well

● Deliveries of rayon filament yarn to domestic consumers in March amounted to 29,500,000 pounds, which is the same quantity as was shipped in February and compares with 26,600,000 pounds in March, 1939, reports the Rayon Organon. Stocks of rayon yarn held by domestic producers at the end of March totaled 10,100,000 pounds as compared with 8,300,000 pounds held on February 29th.

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# Swedish Pulp Mills Report 1939 Profits

● Condensed financial statements for 1939 of four Swedish pulp manufacturing companies appeared in The Swedish Wood Pulp Journal for February 29th, and of these four two made a larger net profit in 1939 than in 1938 while the other two made smaller profits. The following statements are quoted directly from The Swedish Wood Pulp Journal.

## Mo & Domsjö

● "Mo & Domsjö A.-B. has made a preliminary announcement regarding its 1939 balance sheet. This shows that, after allowing for depreciations, etc., the profits amount to 2,45 mill. kr., compared with 1,57 mill. in 1938 and 7,22 mill. in 1937. The allowances for depreciation of mills and equipment amount to 3,11 mill. kr. (last year 2,70), while 0,88 mill. were carried to the Taxation Fund (0,60). Of the profits, 0,50 mill. have in the balance sheet been carried to the Pension Fund, leaving 1,95 mill. for disposal by the company meeting. The directors propose unchanged dividends of 8 per cent on the A and B shares, which accounts for 1,76 mill. kr. and that 2,77 mill. (2,58) be carried to next year's accounts.

"The full report of the directors will shortly be available, and we trust then to be able to give some further particulars of last year's result.

## Billruds

● "Billruds A.-B. has published some advance particulars of its balance sheet for 1939. These show that the gross profits amount to 10,67 mill. kr., compared with 11,3 mill. in 1938 and 10,2 mill. in 1937. The appropriation for the Renewal Fund (depreciation on real and other property) is 3,31 mill. kr. (last year 3,82), for Taxation 2,60 mill. (1,90), and for interest 1,24 mill. (1,56). The net profits amount to 3,52 mill. kr., compared with 4,03 in 1938 and 3,75 mill. in 1937.

"The directors propose that 2,26 mill. kr. be used, like last year, for a dividend of 6 per cent with a bonus of 2 per cent, or 8 per cent in all, and that the profits brought forward be increased by 1,26 mill. to 6,02 mill. (1939: 4,76 mill.; 1938: 2,99 mill.; 1937: 1,49 mill. kr.).

## Kopparfors

● "Kopparfors A.-B. shows a gross profit for 1939 of 3,29 mill. kr. (2,65), 1,26 mill. kr. (0,92) having first been deducted for depreciation of real estate and plant. This includes 0,18 mill. kr. dividend received from Storviks Sulfit A.-B. (0,22). After deduction of administration costs, rates and taxes, pensions, interest, etc., a net profit remains of 1,09 mill. kr., compared with 0,93 mill. in 1938 and 1,54 mill. in 1937.

"The directors propose an unchanged dividend of 5 per cent (1,00 mill.), and that profits brought forward be increased from 0,67 to 0,75 mill. kr.

"The output of the sawmills and pulp mills (the Norrsundet sulphate mill and the Storvik sulphite mill) has, in the last four years, been:

	1939	1938	1937	1936
Woodgoods, stds.	20,000	13,650	18,000	19,600
Sulphate, tons	36,400	37,850	40,000	39,150
whereof				
Bleached, tons	22,200	29,550	20,400	18,250
Sulphite (Storvik), tons	33,050	34,300	35,900	32,250

"It is noteworthy that the output of sawn wood, strongly reduced in 1938, has again been increased to the same level as in 1936. The shipments of sawn wood amounted to 19,900 stds. The above figures do not include box boards, which in 1939 amounted to 1,700 stds., compared with 1,500 stds. in 1938 and 1,800 stds. in 1937.

"The total output of sulphate pulp was slightly less than in 1938, and about 10 per cent less than in the years 1935-1937. The output of bleached sulphate pulp has steadily increased, however, and constituted almost 90 per cent of the total output last year. Of bleached sulphate pulp, 36,500 tons were shipped, compared with 24,350 tons in 1938, which emphasizes the increasing demand for its relatively new product.

"The subsidiary Storviks Sulfit A.-B. shows a net profit of 0,18 mill. kr. compared with 0,12 mill. in 1938 and 0,25 mill. in 1937. The directors propose an unchanged dividend of 5 per cent (0,18 mill.) Profits brought forward are increased from 0,98 to 0,99 mill. kr.

"As in previous years, the production of sulphite pulp has been in accordance with S. P. S. regulations. Of the total output, 33,050 tons, 32,900 tons have been shipped.

## Wifstavarfs

● "Wifstavarfs A.-B. has now published its 1939 balance sheet.

"The net sales value amounted to 17,1 mill. kr., compared with 20,3 mill. in 1938 and 24 mill. in 1937. The industrial activity showed a profit of 1,26 mill. kr., compared with 1,97 in 1938 and 2,51 in 1937. The gross profits were 2,40 mill. kr., as against 2,88 mill. in 1938 and 3,60 in 1937. After deducting 0,40 mill. interest paid, about the same as last year, the net profit of 2,01 mill. kr. remains (1938: 2,47; 1937: 3,16; 1936: 1,58). Depreciation is allowed for in closing the books, and the amounts are not shown in the balance sheet.

"An amount of 4,09 mill. kr. is at the disposal of the shareholders' meeting, including 2,08 mill. kr. profits brought forward. The directors propose an unchanged dividend of 10 per cent (1,45 mill. kr.), an appropriation of 0,80 mill. (1,00) to the taxation reserve, and that 1,84 mill. kr. be carried forward to next year's accounts.

"The output of the company's most important products in the last four years is given in the following table:

	1939	1938	1937	1936
Wood, stds.	13,800	13,000	17,250	19,500
Sulphite, tons	62,750	63,200	70,650	62,350
Sulphate, tons	31,450	37,100	44,300	42,350
Cardboards, tons	2,000	1,300	1,750	1,650

"The production of wood was thus 800 stds. more, while the shipments amounted only to 11,250 stds., as compared with 14,900 stds. in 1938.

"The production of sulphite pulp fell

by 550 tons, but the shipments increased by 600 tons to 62,950 tons.

"The production of sulphate pulp decreased by 5,650 tons, while the shipments increased by 1,200 tons to 34,800 tons. The capacity of the sulphate mill is about 50,000 tons a year and was thus not utilized to more than around 75 per cent."

## Borregard Subsidiary

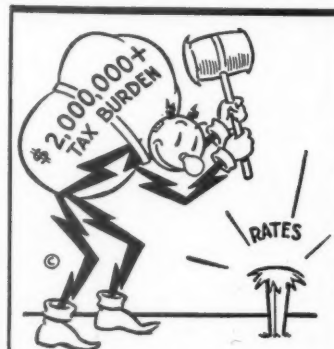
● A.-B. Molnbacka-Trysil, which is entirely owned by the Borregaard concern, is declaring a practically unchanged net profit for 1939 of 0,57 mill. kr. This has been arrived at after appropriations of 0,57 mill. kr. to the depreciation fund, like last year, and 0,30 mill. for rates and taxes (last year 0,20). The dividend will be the same as last year, 4 per cent (0,56 mill.), and 0,56 mill. kr. are also carried forward to the new accounts.

The company's output of cellulose and paper has in the last four years amounted to the following quantities:

	1939	1938	1937	1936
Sulphite pulp, tons	22,700	21,900	31,000	29,200
Sulphate pulp, tons	34,500	24,100	37,300	35,000
Kraft paper, tons	32,250	22,200	37,200	34,500

Practically the whole output of sulphate cellulose is used for own production of kraft paper.

The directors' report emphasizes that the improvement in 1939 of the market



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for processed wood products has on the whole only compensated for the heavy increase in the production costs. It has not been possible to utilize with advantage the full capacity of the sulphite mills, and a stoppage due to a fire caused a loss in the production of about 2,000 tons. Work at the kraft paper mills was somewhat restricted in the first half year, but was kept well up afterwards.

### Uddeholms

● Uddeholms A.-B. shows in the 1939 balance sheet—according to a preliminary announcement now made—a net profit of 5,35 mill. kr., compared with 5,28 mill. in 1938. The trading profits have increased to 14,90 mill. from 12,80 mill. the year before, but the allowance for depreciation of the plant has been increased by 0,13 mill. to 6,05 mill. kr., while 1,90 mill. more, or 3,50 mill. kr., have been reserved for taxation. The directors propose that an unchanged dividend of 6 per cent be paid on the share capital, now increased from 56 to 62 mill. kr., which will take 3,72 mill. (last year 3,36), that 1,20 mill. be carried to the reserve fund, and that profits brought forward be increased by 0,44 mill. kr. to 7,92 mill. kr.

### Norwegian Yearly Reports

● Saugbrugsforeningen shows a profit for 1939 of 0,92 mill. kr., compared with a loss in 1938 of 1,19 mill. and a profit in 1937 of 2,64 mill. of last year's profit, 0,50 mill. will be appropriated for depreciations, 0,37 mill. reserved for rates and taxes, and 44,000 kr. carried to next year's accounts.

The output last year was 24,500 tons of bleached sulphite (compared with 17,500 tons in 1938 and 28,100 tons in 1937), and 26,400 tons of paper (20,000 and 23,100 respectively). Wood shipments amounted to 8,350 stds (7,050 and 8,200 respectively).

### Union Company

● The Union Co. shows in its concern balance sheet for 1939 a net profit of 25,000 kr. after deduction of 1,93 mill. kr. for interest charges and 1,26 mill. kr. for depreciation of plant.

The directors' report states that 1939 was an abnormal year. In its earlier part, work had to be generally restricted, and it was very difficult to sell, but gradually the world-markets hardened. War broke out at the beginning of September, and greatly interfered with both purchases and sales, while the particular financing difficulties of the company became increasingly prominent.

In the course of the year the company has wound up its interests in Gulslogen, Randsfjord, and Viul. The last named transaction resulted in a loss, but the guarantee liability of the Union Co. has on the other hand been eliminated. The directors propose that this particular loss of 0,43 mill. kr. be written off the contingency fund, and that the balance of this, 0,25 mill. kr., be credited to the Kittilsen, Laugstol, and Grubbe Companies by way of extra depreciation allowances for their plants.

The report also gives particulars of the above mentioned program of refinancing, which will be submitted to the decision of the company meeting.

### Borregaard

● A/S Borregaard shows for 1939 a net profit of 2,95 mill. kr., as against 2,32 mill. in 1938 and 3,92 mill. in 1937. The directors propose a dividend of 4 per cent, as against 3 per cent in 1938 and 5 per cent in 1937. In this last balance sheet, 0,55 mill. more than the year before was reserved for taxation, and the result is therefore about 1 mill. kr. better than in 1938.

The directors' report states, among other things, that sale prices are showing a rising tendency in the European markets, and have now reached a profitable wood. In a market as large and important as the U. S. A., however, prices have risen considerably less, developments there being regulated by the large home production. Owing to the heavy freights and costs, most Scandinavian mills are at present actually losing money on their deliveries to the United States.

The price of ordinary bleached sulphite for paper-making, which before the war was 180-200 kr. per ton f. o. b., is now about 175 kr. more in the European markets. Unbleached sulphite has in the same markets risen by about 150 kr. per ton from 130-150 kr. Current prices for shipments to U. S. A., however, render from 75 to 100 kr. less per ton than the said sales to Europe.

The stocks of wood at both the Norwegian Swedish and the mills of the company have by the turn of the year been reduced to normal values, and are booked at very satisfactory values.

### Some of Us Are Like This Beaver

● The Post-Record of Camas, Washington, published recently the following interesting story of a beaver who tried to stop the Camas mill. You can draw your own moral.

"Diligently for two weeks a lone beaver tried in vain to halt the wheels of Camas' mighty paper industry. Patiently, methodically from sunup to dusk he swam against the brisk current in the mill ditch to a point beyond the tunnel, secured a piece of wood and drifted down to the grate at the forbay in a determined effort to build a dam.

"But each time he deposited his stick, the filter plant caretaker would take it away while the beaver was on his way upstream. Finally, after two weeks of trying, his animal brain told him he wasn't getting anywhere. So he jumped into the nearby settling basin.

"Unable to get out and without any food he was in a bad fix until Sunday when a game protector, at the behest of mill officials, rescued him with a net."

### Swedish Wood Pulp Assn. Holds Meeting

● The Swedish Wood Pulp Association relected its council at the annual meeting in Stockholm on March 12th. As before, Mr. Lennart Biesert is chairman and captain P. H. Hedberg, vice-chairman.

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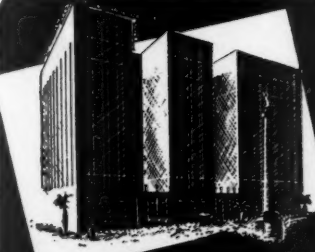
## PULP BLEACHING COMPANY

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## CELLULOSE PURIFICATION EQUIPMENT

### Swedish Cellulose Assn. Holds Meeting

● The Swedish Cellulose Association held its ordinary Spring Meeting on March 13th. The council was re-elected, the only change being that Mr. Emil Lundqvist of Stora Kopparbergs Bergslags entered as ordinary member instead of Mr. Oscar Lundqvist of Stroms Bruk, who had declined re-election. Mr. Fabian Lundqvist of Stroms Bruk became new deputy member instead of Mr. Emil Lundqvist, and Mr. Ivar Kull, Konga, succeeded Mr. E. Ekeberg.



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